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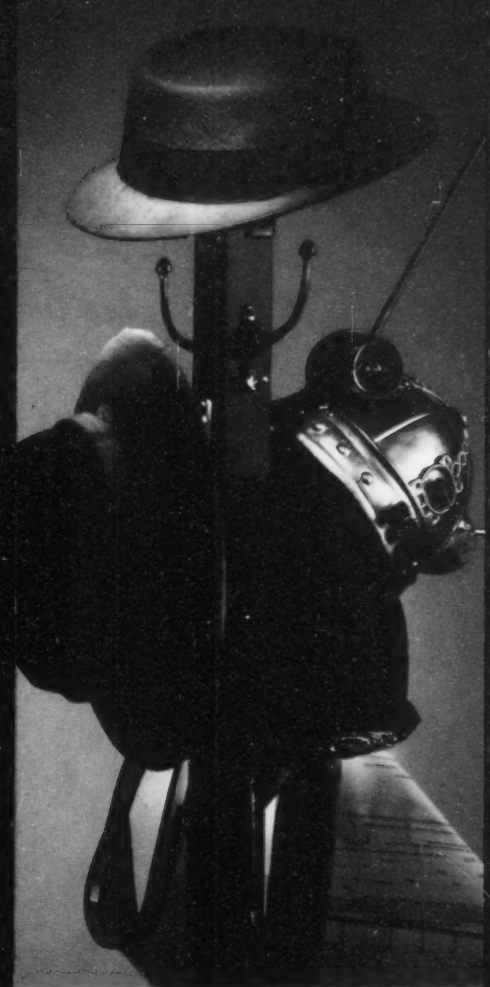

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The Business CIO

Now more than ever, experience outside of IT counts. Learn why. PAGE 24

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DECEMBER 15, 2008
VOL. 42, NO. 49 $5/COPY

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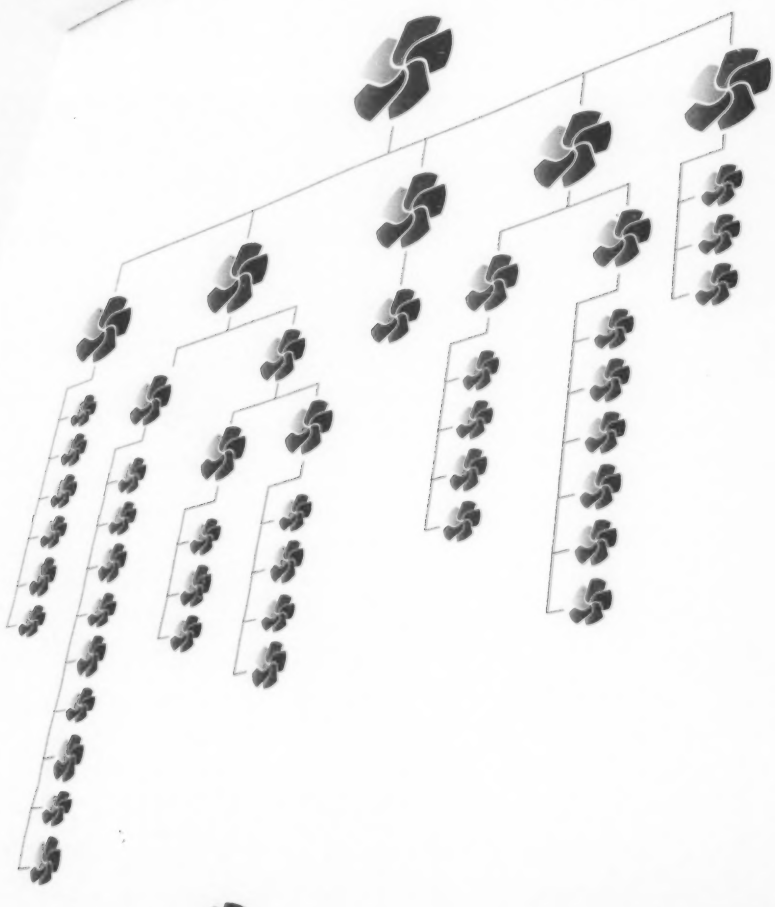
From corner office to cubicle... And every document in between.



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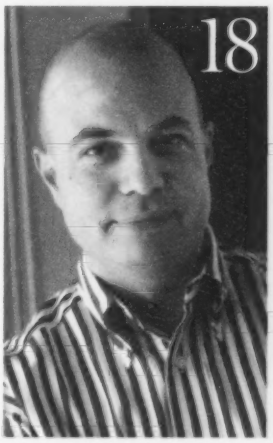

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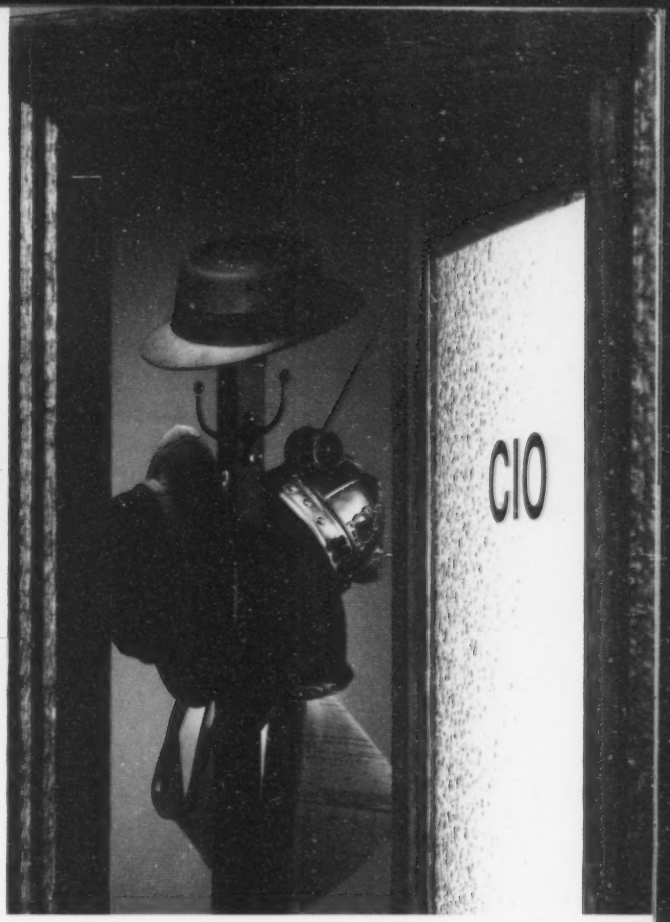

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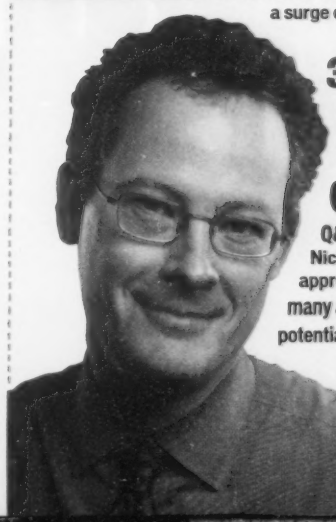

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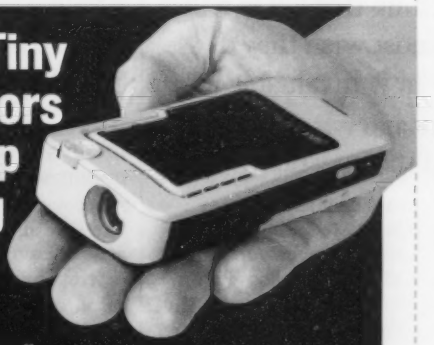
Three Tiny Projectors Light Up The Big Screen



REVIEW: Astonishingly small, the newest microprojectors can lighten a mobile worker's load considerably. But do these pocket projectors measure up in the conference room?

Blog Spotlight

Evil Holiday Offerings

Are video games the devil's playthings? A conservative investment group has offered its advice on how to keep the antichrist out of your Xbox this holiday season. Dan Tynan has some other ideas.

No Kindle for Christmas

Amazon has run out of every book lover's favorite Linux device: the Kindle. But there are other good choices, like the Sony Reader, suggests Steven J. Vaughan-Nichols.

Which Google Projects Will Bite the Dust?

Thanks to the recession, Google has begun killing projects that haven't made it financially. Preston Gralla examines the ones that have already been deep-sixed – and the ones that should be.

The Best Privacy Advisers in 2008

SURVEY: Jay Cline conducts his most thorough survey yet on data protection consultants. In its third year, the survey finds trends in how pros manage customer and employee data.

We Need a Mobile Broadband Space Race

OPINION: We put a man on the moon, so why can't we have fast, nationwide mobile broadband? asks Mike Elgan.

Looking for Product Advice?

Search the *Computerworld* reviews database by category (such as laptops, desktop applications, personal technology and wireless devices), product name and more.

»MAC COVERAGE

Mac Security Debate Resumes

OPINION: Michael DeAgonia says the age-old debate about just how secure Mac OS is was revived recently when Apple put up a notice on its Web site advising users to run antivirus software but then quickly took it down without explanation.

10 Ways to Slim Down and Speed Up Your Mac Now

Apple has indicated that its upcoming operating system, Snow Leopard, will be sleeker and faster than its predecessors. But with a few simple steps, you can add some zing to your current version of Mac OS X.

SHARK BAIT

Unforeseen Circumstances

In the current economy, IT companies are experiencing workforce reductions. But sometimes the powers that be don't think through the consequences of letting certain people go.

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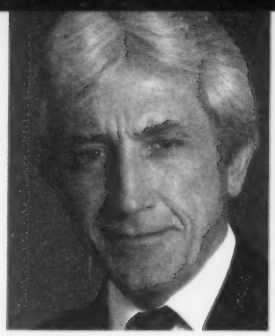
■ EDITOR'S NOTE

Don Tennant

Empowering Resources



AT A RECENT presentation for a group of senior IT executives, I posed the following question: In the year 2014, what's the one thing that CIOs will say they've learned that they most wish they'd known back in 2009? When you consider how invaluable it would have been to have known five years ago what you know now, you can fully appreciate why I asked the question.

To prepare for the presentation, I decided to run the question by a few people, and what better person to ask than author and *Computerworld* columnist Thornton May, who makes a living as an IT futurist?

May's response reflected his sense that "the CIO job is too big — too much to know, too much to do, too many relationships to manage, too much information to act upon." He said that in 2014, CIOs will realize that what they really needed were "great direct reports" in whom there was a heavy investment in a "skills, competence and knowledge upgrade."

I was reminded of that response when I read the profiles of our 2009 *Computerworld* Premier 100 IT Leaders, and it was one of the factors that prompted me to write about the honorees' high regard for people in my Editor's Note last week. These IT leaders, I realized, already know things that many of their peers will need another half-decade to internalize.

This year's class of P100 IT Leaders has already figured out what Michael Collison, director of IS operations and software integration at Auto Warehousing Co., articulated so well: "[I] lead by example and try to enable those who report to me to use their skills to complete their projects. I try to give them direction and the tools to get the job done and then get out of their way."

It turns out that getting out of the way is a remarkably common theme in the leadership philosophies of these IT leaders. Empowering the people who work for them is clearly a hallmark of their success.

"Empower people to solve problems at the lowest possible level in the organization," advises Janet McQueen, CIO at Blue Care Network of Michigan. Echoes Baron Concors, CIO at Pizza Hut: "Take a personal interest in your team members' growth, and empower them to succeed."

■ These IT leaders already know things that many of their peers will need a half-decade to internalize.

"The best leaders resist the urge to solve the problem," explains Jeremy Meller, CIO at Marshfield Clinic. "Instead, they work to better equip their subordinates and make them more effective — both in current and future roles."

"A leader will be judged by the people he mentors and ultimately leaves behind," adds Christopher Barron, CIO at CPS Energy. "More than any other action, a good leader will do whatever is necessary to find great talent wherever it lies and develop it."

"Great leaders build high-performance, diverse teams," says Marie Mouchet, CIO at Southern Company Generation. "Ultimately, it is all about the people."

And I was especially gratified to see this from Mal Griffin, CIO at the Interior Health Authority in British Columbia: "Listen first, speak last, and recognize your people. . . . People are your greatest asset."

When I wrote in last week's column of my concern that people are becoming depersonalized in the workplace, I stressed that they're not numbers or commodities. A reader subsequently commented, "They're also not 'resources.' " I disagreed, saying:

"Not only are people resources, but they're our best resources. They're also assets, and they're our best, most important assets. Those words do not suggest depersonalization. They suggest appreciation and value." Another reader added what I should have included in my response: "I like knowing that I am a valuable resource and asset to my employer and co-workers."

So if anyone suggests it's wrong to think of your team members as resources, don't buy it. Just make sure you keep them at the top of that list, where they belong. That way, when 2014 arrives, you won't be among those saying, "If only I'd known." ■

Don Tennant *is* Computerworld's *senior editor-at-large. You can contact him at don_tennant@computerworld.com, and visit his blog at* http://blogs.computerworld.com/tennant.

RESPONSES TO:

IE Share Slips Under 70%; Firefox Surges Past 20%

Dec. 1, 2008

Along with the news that Windows' market share has dived below 90%, this shows that the applications barrier to entry that Microsoft built its monopoly on is finally starting to fall. Cloud computing, browser-resident applications, mobile decks, Google in search and Apple in entertainment are dialing in a new period of access and choice.

■ **Submitted by:** *Anonymous*

Great news that the sluggish, market-skewing monstrosity of Microsoft is falling from its monopoly position. An increase in the use of Mac and Linux computers and alternative browsers can only be good for the consumer.

As the competition gets a better hold, Microsoft will never again be able to get away with launching such rubbish as Vista.

Competition makes the products better and cheaper — which benefits us, the consumers, whether we are Mac, Linux or Windows fanboys!

■ **Submitted by:** *T20racerman*

So how many viable alternatives to Windows do we need until the monopoly label is removed and antitrust restrictions are lifted? Apple enjoys many freedoms that Microsoft doesn't because it doesn't have the DOJ breathing down its neck.

■ **Submitted by:** *Hoopskier*

RESPONSES TO:

Less (Complexity) Is More (Flexibility)

Dec. 1, 2008

John Halamka is quite right that simplicity is an important goal for IT architectures. Unfortunately, we have few tools to understand what makes things complex and few processes to help us remove complexity. I have been advocating for some years now for a Science of Simplicity. I believe that we must start by understanding the mathematics of IT complexity and the formal processes that remove complexity from IT architectures.

Why do we need to understand the mathematics of complexity? For the same reason that a rocket architect needs to understand the mathematics of planetary motion and gravity. For the same reason that a bridge architect needs to understand the mathematics of fluid dynamics and structural loads. For the same reason that a database architect needs to understand the mathematics of data relations. If we do not understand the mathematics of our particular discipline, we have no way to test our proposed systems without building them.

Complexity is truly IT's enemy, but we must know it intimately if we are to win the battle.

■ **Submitted by:** *Roger Sessions, author of* Simple Architectures for Complex Enterprises

If only we could get this concept cemented in our application development processes. The question we should first ask when developing an application is, "Does this feature/function add complexity, and, if so, is it worth it?" Complexity caused because the developer thought of a "cool" way to do something IS NOT WORTH IT. Complexity caused because an architect wanted to design for every possible situation IS NOT WORTH IT. "Good enough" is the idea. Often, the tools and architectures we are given to work with, either by vendors or corporate architects are so overdesigned as to be almost unusable. I love John's ending quote, "Fools ignore complexity. Pragmatists suffer it. Geniuses remove it." By this definition, I've known a lot of fools.

■ **Submitted by:** *Phil Coons*

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News Digest

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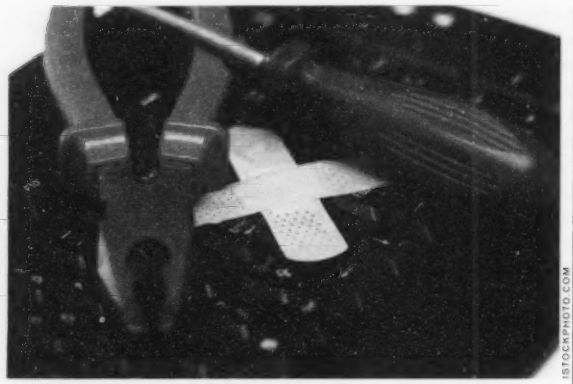
THE WEEK AHEAD

TUESDAY: *Computerworld* and sister publication *InfoWorld* jointly host Security Directions, a one-day virtual conference on IT security. And Microsoft holds the third in a series of one-day MSDN Developer Conference events, this one in Atlanta.

WEDNESDAY: The PCI Security Standards Council holds two webinars on Version 1.2 of its data security standard.

THURSDAY: Oracle, Research In Motion, 3Com and Palm are scheduled to report their latest financial results.



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SECURITY

Microsoft Update Leaves Some Bugs Unpatched

MICROSOFT CORP. last week acknowledged that its massive December security update didn't include patches for potentially critical vulnerabilities in Windows and Internet Explorer.

The company last Tuesday released patches for 28 software flaws; it was Microsoft's biggest batch of fixes since it launched the regular monthly update schedule more than five years ago.

Later that day, Microsoft said that "limited and targeted" attacks were under way by hackers exploiting an unpatched flaw in the WordPad Text Converter tool bundled with Windows.

The company said that users must be tricked into opening the malicious files, which are likely to be delivered as e-mail attachments.

A day later, Microsoft acknowledged an unpatched vulnerability in IE 7 after code needed to maliciously use it was released — mistakenly — by Chinese security researchers. The flaw can infect computers running IE7 on Windows XP.

In a security advisory, Microsoft warned users about the IE flaw and listed countermeasures to take in lieu of a patch. It did not say whether it would patch the bug.

VeriSign Inc.'s iDefense Labs unit said that a blog post from the Chinese research team reported that the attack code at one time traded for $15,000 on underground markets.

The December updates include eight patches for bugs in Windows, Internet Explorer, Office, SharePoint, Windows Media, Visual Basic and Visual Studio. Microsoft ranked 23 of the 28 vulnerabilities fixed by the patches as critical, the top rating in its four-step scoring system.

Researchers agreed that the first patch IT managers should apply is one for the Windows Graphics Device Interface (GDI). Andrew Storms, director of security operations at nCircle Network Security Inc., said hackers could exploit the GDI vulnerabilities by duping users into opening or viewing malicious Windows Metafile images.

Other GDI bugs have been patched in the past, and Storms said the continual patching of the graphics rendering engine will likely lead to questions about the efficacy of Microsoft's Security Development Lifecycle process, which looks for bugs as code is written.

"I think that's a fair question," said Wolfgang Kandek, chief technology officer at Qualys Inc. "But is it realistic to expect Microsoft to find everything? No, it's not."

— Gregg Keizer, with Jeremy Kirk of the IDG News Service

CYBERCRIME

Spam Levels Rise Again After McColo Fallout Fades

SPAM VOLUMES are creeping up again after plummeting four weeks ago when a rogue hosting company was yanked off of the Internet.

IronPort Systems Inc., a maker of e-mail security tools, said that spam volumes last Tuesday reached 96.8 billion messages, over 30 billion more than were sent in the days following the Nov. 11 takedown of McColo Corp. by its primary Internet service providers.

An average of 190 billion spam messages were sent daily in the month prior to the shutdown of McColo for allegedly harboring cybercriminals running some of the biggest spam-spewing botnets.

Joe Stewart, director of malware research at SecureWorks Inc., said botnets that were mostly unaffected by McColo's disappearance are responsible for the resurgence.

– GREGG KEIZER

■ **Srizbi and Rustock – the world's largest and third-largest botnets, respectively, before Nov. 11 – have faded into the background.**

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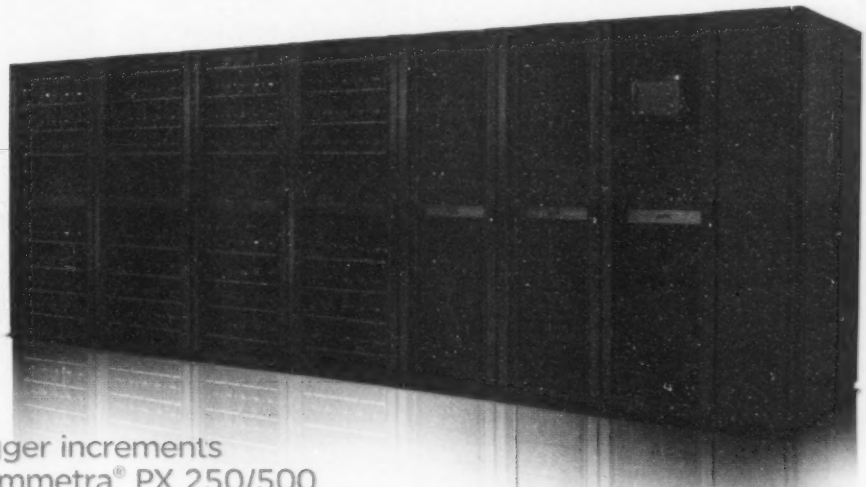

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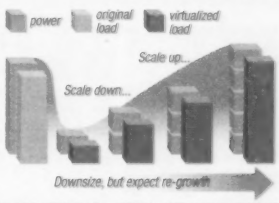

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SOFTWARE

Sun Exec OK With Rant By MySQL Co-founder

MICHAEL "Monty" Widenius, the original developer of the MySQL open-source database, put a damper on Sun Microsystems Inc.'s recent release of MySQL 5.1 by sharply criticizing the decision to make the update generally available.

In a Nov. 29 blog post, Widenius, chief technology officer for Sun's MySQL operation, warned users to be "very cautious" about the 5.1 release. "There are still many known and unknown fatal bugs in the new features," he wrote.

Despite the public insubordination, Widenius remains at Sun, which bought MySQL AB in January. And his criticisms reflect Sun's open-source ethics, said Marten Mickos, who was MySQL's CEO before the acquisition and now is senior vice president of Sun's database group.

"I learned over many years about the benefits and the painfulness of absolute transparency in open source," Mickos said last week. "A little bit of debate never hurts. This is part of being an open-source company. People are free to blog about what they want."

Widenius blamed Mickos for what he said was a premature decision to designate MySQL 5.1 as a generally available product.

"Quality is not regarded to be that important," wrote Widenius. "To quote Marten Mickos: 'MySQL 5.1 will be release[d] as GA in or before December because I say so.' " He added that Mickos "needs something he can sell" and that a GA version is easier to promote than a release candidate.

Mickos declined to address the specific points made by Widenius, but he said that the long-delayed 5.1 release is "great" and that he is "very confident" about the software. The update was downloaded more than 250,000 times in the first 10 days it was generally available, according to Sun.

Widenius clarified — and softened — his position in a follow-up blog comment on Dec. 7: "I think that MySQL 5.1 is a good *recommended* release, especially now when MySQL/Sun is providing full support for it." But he said he disagreed with giving MySQL 5.1 GA status, because doing so implies that it wouldn't crash and doesn't have serious bugs.

Widenius said that he hopes the goal of eliminating all major bugs in MySQL 5.1 will be reached "more sooner than later."

— Chris Kanaracus, IDG News Service

"A little bit of debate never hurts. This is part of being an open-source company. People are free to blog about what they want.

MARTEN MICKOS, SENIOR VICE PRESIDENT OF SUN'S DATABASE GROUP

Short Takes

Laptops stolen from employees of Hewlett-Packard Co. and Symantec Corp. contained personal data on people who work at those companies. The HP laptop held Social Security numbers of several thousand employees, while the Symantec PC had the same data on about 100 people who were about to be laid off.

Yang Yuanqing, chairman of Lenovo Group Ltd., acknowledged that his company is in talks to acquire other PC makers. Lenovo, which hopes to expand its worldwide presence, declined to disclose its negotiating partners.

Chad Fulgham, former senior vice president and head of the IT division at Lehman Brothers Holdings Inc., has been named CIO at the FBI.

Compuware Corp. has released Changepoint 2009, the latest version of its IT project portfolio management software. The update, priced at $400 per user, includes new, more-sophisticated capabilities for planning IT investments.

TECHNOLOGY INDUSTRY

IT Vendors Cut Financing Rates Down to Nothing

HEWLETT-PACKARD CO. has a deal for you: zero-percent financing for up to 36 months on leases of many of its enterprise software products. The offer, announced last week, applies to software contracts worth more than $100,000 and will be in place through Jan. 31.

With the economy in recession and IT spending forecasts being cut, HP is just one of several technology vendors that are using financing incentives to try to lure enterprise users to buy or upgrade products now rather than later.

In November, for instance, Microsoft Corp. offered zero-percent financing for up to 36 months to qualifying buyers of its Dynamics ERP and CRM applications (see related story, page 14). Also last month, Dell Inc. announced financing rates as low as zero percent on leases of 12 to 48 months.

In addition, IBM has special offers on hardware sales during the current quarter, including a no-charge deferral of payments for up to three months followed by lower-than-usual interest rates. IBM called that promotion "Why Wait?" – a catchphrase that neatly sums up its goal of enticing customers to make purchases now instead of putting them off.

IDC analyst Robert Mahowald said he expects zero-percent financing to save users 5% to 8% on typical IT purchases. "To some extent," he said of HP's offer, "it's a concession that they need customers to stay on an upgrade path and that customers may need the help to do so."

– PATRICK THIBODEAU

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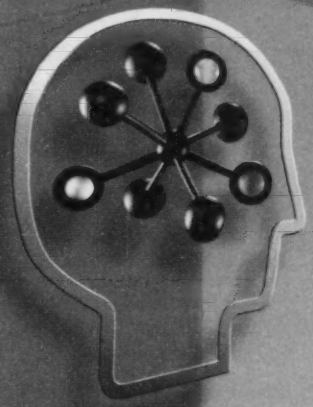

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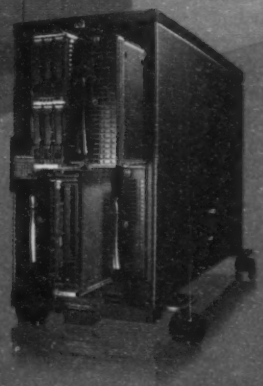

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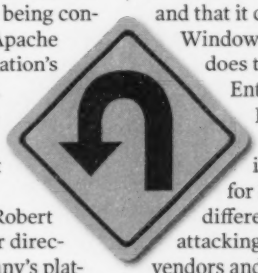
SOFTWARE

Microsoft Reverses Course, Becomes More Open to Open-Source Community

WHEN Microsoft Corp. bought Powerset Inc. in July, it acquired more than just search engine technology. It also became the owner of open-source code that was — and still is — being contributed to the Apache Software Foundation's Hadoop project.



Having open-source technology in a product was a first for Microsoft, said Robert Duffner, a senior director in the company's platform strategy group. Also in July, Microsoft began providing internally developed code to an open-source project called ADOdb, which produces a database abstraction library for the PHP and Python scripting languages.

Via such moves, the platform strategy unit is pushing the software vendor not only to accept that its products need to interoperate with open-source technology, but also to view the latter as beneficial to its business goals.

That's a far cry from the "us vs. them" stance that Microsoft long took toward open source — as epitomized by the company's May 2007 claim that open-source technologies were infringing on 235 of its patents.

"It's been quite a while since we've heard much saber rattling," said Jay Lyman, an open-source analyst at The 451 Group. "It's indicative that there is true change going on over there."

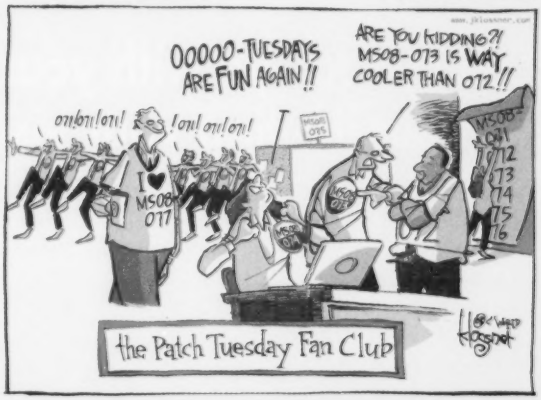
The changes aren't complete, though. "There are some groups [where] it's taking longer for the message to filter down," acknowledged Peter Galli, the platform strategy unit's senior open-source community manager.

And Microsoft still thinks that its software is superior and that it costs less to run Windows Server than it does to use Red Hat Enterprise Linux, Duffner said.

Lyman said it makes sense for Microsoft to differentiate between attacking open-source vendors and criticizing open source as an ideology. The latter, he said, has proved to be a battle that Microsoft can't win.

— Elizabeth Montalbano

BETWEEN THE LINES *By John Klossner*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BENCHMARKS LAST WEEK

Intel Corp. said it has finished development work on new manufacturing technology that will enable it to produce chips with circuitry just 32 nanometers wide by next year's fourth quarter.

Sun Microsystems Inc. agreed to let Southeastern Asset Management Inc., its largest shareholder, name two new members to the vendor's board.

Oracle Corp. signed an agreement to buy business applications rival PeopleSoft Inc. for $10.3 billion, ending a bitter takeover battle that lasted more than 18 months.

Global Dispatches

SAP Shifts Support Plans For Some

WALLDORF, Germany – SAP AG last week announced that it has agreed not to force customers in Germany and Austria to shift to the company's fuller-featured but more expensive Enterprise Support program.

SAP had announced in July that it planned to move all customers worldwide to the new service as of Jan. 1.

In a statement, SAP said it will allow companies in Germany and Austria to retain their current support programs in order to comply with local laws that require the termination of "existing contracts to facilitate the switch to SAP Enterprise Support."

An SAP spokesman declined to say whether the company expects to change the requirement in other countries.

Chris Kanaracus,
IDG News Service

Chinese Invited to Computex Taipei

TAIPEI – Companies from mainland China will be able to exhibit at the Computex Taipei trade show for the first time next year, as part of an effort by the new Taiwanese government to improve relations with its neighbor.

The conference is slated to be held here from June 2 to 6.

Computex organizers have set aside 200 booths for Chinese companies, "many of them data communications companies," said Li Chang, deputy secretary general of the Taipei Computer Association, last week.

The announcement comes just months after Ma Ying-jeou was sworn in as Taiwan's new president.

Dan Nystedt,
IDG News Service

BRIEFLY NOTED

Sony Corp. last week said that it plans to cut 8,000 jobs, or 5% of its worldwide workforce; close factories; and reduce electronics investment by nearly one-third because of the declining economy. Sony hopes to save ¥100 billion ($1.1 billion U.S.) in the fiscal year ending in March 2010.

Martyn Williams,
IDG News Service

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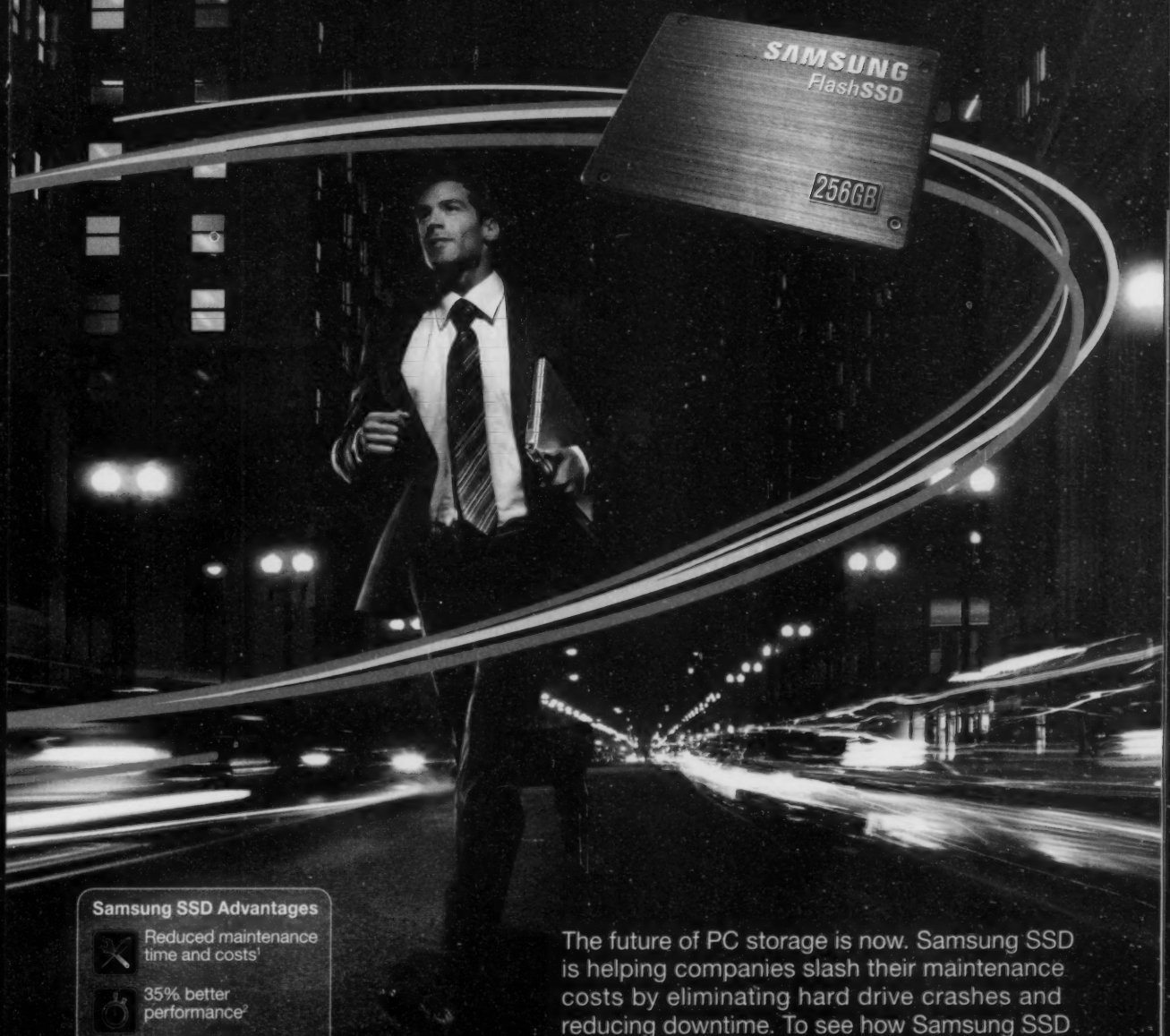

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1) IDC white paper, Nov. 2007 2) SysMark 2007 Benchmark Test
3) 1500 G-0.5 ms SSD vs. 110 G/0.5 ms HDD
4) Reliability Demonstration Tests 5) 0.4 watts SSD vs. 2.0 watts HDD
Actual performance will vary based on configuration, usage and operating conditions

Obama Looks to Give Digital Economy a Shot in the Arm

Funding for technology initiatives is expected to be a big part of the incoming president's economic stimulus plan. By Patrick Thibodeau

PLEDGING TO "renew our information superhighway," President-elect Barack Obama this month offered a broad outline of an economic stimulus plan that will likely include increased spending on broadband access and other IT initiatives.

The stimulus plan, which Obama detailed in bare-bones fashion during his weekly video address on Dec. 6, could lead to wider availability of broadband services, particularly in rural areas. It also may fund new computers for schools and technologies that can help reduce medical costs.

The plan's overall cost is expected to be in the hundreds of billions of dollars, so the amount of money that will be made available for IT-related investments could be quite large.

James Gabberty, a professor at Pace University's Seidenberg School of Computer Science and Information Systems in New York, said it's hard to measure the impact of tech spending on productivity. There's no way to quantify, for instance, that "the growth of a nation's goods and services will be *x* if you spend *y* number of dollars on hardware, software and communications gear," he said.

But Robert Atkinson, who heads the Information Technology and Innovation Foundation (ITIF) in Washington, thinks tech investments will help stimulate the economy. While many traditional economists focus on projects such as building roads and bridges, "we need to expand our vision" to include IT, said Atkinson, who is working with federal agencies as a member of Obama's transition team.

In a paper published in October, the ITIF argued that IT investments produce outsized productivity gains. And in discussing a possible stimulus plan, the nonpartisan think thank said that the U.S. can't afford to focus only on a "consumption-based [effort] that leaves the nation with little to show after consumers spend the money and the economy gets back on track."

One step that the ITIF recommended to spur corporate technology buying is to allow companies to write off all such purchases for tax purposes during 2009.

Broadband expansion is likely to be a priority for Obama's administration. Although the U.S. currently has about 75 million broadband users, the Paris-based Organisation for Economic Co-operation and Development ranks it only 15th out of 30 industrialized countries on broadband adoption. In his speech, Obama called the level of access in the U.S. "unacceptable."

Even now, only about two-thirds of Americans have a computer at home, according to the ITIF. Atkinson said the federal government could increase PC ownership through a program that subsidizes the cost of computers and Internet access. For less than $1 billion, the U.S. could help about 1.5 million households get online, he claimed.

Obama also said he wants to ensure that every hospital and doctor in the U.S. "is using cutting-edge technology and electronic medical records, so that we can cut red tape, prevent medical mistakes and help save billions of dollars each year."

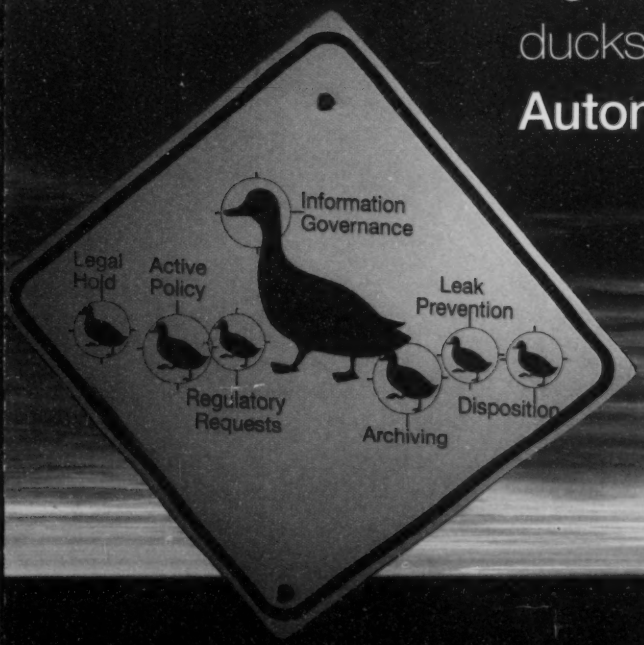
The Arizona Telemedicine Program is employing technology to do just that. For instance, the program, which is funded by the state government and based at the University of Arizona College of Medicine in Tucson, created a teletrauma service that enables trauma specialists to assist medical facilities in remote areas. Using cameras, videoconferencing equipment and remote sensors, the specialists can examine a patient's injuries and view X-rays.

Dr. Ronald Weinstein, the program's director, said the telemedicine initiative has helped save lives and reduce costs — in some cases by eliminating the need to fly patients to hospitals for specialized treatment.

Weinstein said he hopes Obama will continue to fund a telemonitoring program at the U.S. Department of Veterans Affairs. As part of that program, cell phones are used to prompt patients to take medications or to deliver messages related to their individual medical needs. Cell phones, Weinstein said, are becoming "central to the delivery" of health care services. ■

Is SharePoint enough?

In the wake of new regulations, make sure your ducks are in a row with **Autonomy ControlPoint**.



Autonomy

Meeting Governance Needs with Autonomy ControlPoint

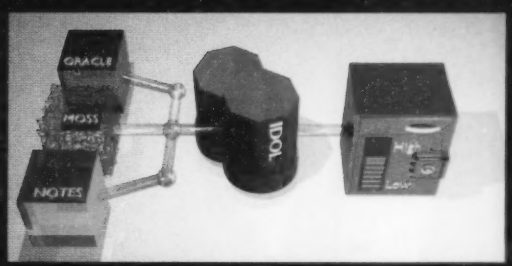
Microsoft Office SharePoint Server (MOSS) provides a portal environment for enterprises to improve departmental collaboration. It has been rapidly deployed because of its ease of installation and straightforward user interface.

Ironically, this rapid proliferation of SharePoint has led many companies to lose control of the very content they had hoped to manage. Because SharePoint is so easy to deploy, many SharePoint sites are created outside of the company's standard operating procedure for controlled information and archiving, often leading to litigation resulting from compliance violations and accidental preservation or destruction of legally relevant material.

In the wake of new regulations, sub-prime mortgage and credit crisis, and highly publicized internal fraud cases, organizations are under increased pressure to implement consistent information policies for finding, holding and disposing of content in a timely manner.

Advanced needs

Designed for easy collaboration, MOSS only addresses the "productivity" stages of the information lifecycle, with inadequate controls for maintenance and disposition of content. It lacks governance functionality including advanced needs around taxonomy creation or categorization of documents against a classification schema, which powers information management policies as well as crucial records management processes.



Applying legal hold policies within MOSS can be onerous and requires manual search and tag methods. Companies are also recognising that they have no centralized control or discovery of the information being published and collaborated on in SharePoint servers that are increasingly siloed, which can lead to severe regulatory consequences.

Autonomy, a global leader in infrastructure software for the enterprise, integrates transparently with MOSS to enhance SharePoint's information governance and eDiscovery capabilities. Autonomy ControlPoint is the industry's first information governance platform that enables real-time, policy-driven control of all SharePoint content, ensuring that customers are able to manage their SharePoint content in true alignment with today's growing corporate, legal or regulatory standards.

Critical governance tasks

ControlPoint automates critical governance tasks, including classification, preservation or disposition of information assets based on its unique ability to understand the meaning of information being shared across different SharePoint servers and other content repositories. Based on this conceptual understanding, ControlPoint automatically applies and enforces governance policies, bringing all SharePoint content under control and into compliance.

ControlPoint alleviates the need to assign teams of risk managers, legal professionals and compliance officers to manage information risk developing across SharePoint sites. It uses a centralized policy hub to enforce governance control across distributed networks, an increasingly critical function given that SharePoint servers are typically siloed throughout the enterprise.

At the heart of ControlPoint lies Autonomy's Intelligent Data Operating Layer (IDOL) Server. IDOL forms a conceptual and contextual understanding of all content in the enterprise, indexing and automatically analyzing any piece of information from over 1,000 different content formats. For the heterogeneous enterprise that holds SharePoint as just one source of data, Autonomy's mature connector framework (supporting over 400 different types of repository) enables search across the entire enterprise corpus from the SharePoint interface, allowing for an unprecedented view of the organization's information assets as well as for legally compliant searches.

With ControlPoint, all information is visible, transparent, and available to be controlled and governed. For instance, ControlPoint can perform comprehensive discovery across all information to find out what resides in SharePoint sites. It then determines what content sits outside the disposition spectrum and creates a policy to delete such information from SharePoint. ControlPoint can also discover that potentially sensitive information is not properly governed with adequate security and compliance procedures, and automatically move the content to the ControlPoint records management archive or put it on preservation should it be subject to a legal matter.

The ControlPoint policy engine can be constructed to perform automated actions, preserve and dispose of SharePoint content, and move information across SharePoint sites. ControlPoint provides full reporting functionalities, and a high-level dashboard designed for non-IT personnel that presents a holistic view of the enterprise's information governance landscape.

ControlPoint provides the flexibility to manage records in the most appropriate storage device based on the age, usage or importance of the data. This greatly reduces storage costs by eliminating the need to license costly SQL servers and alleviates the strain on network resources.

ControlPoint's integrated SharePoint client makes it easy to move content from SharePoint document libraries into the Autonomy repository while leaving a Smart Shortcut, or link behind. After migration, Autonomy manages the storage lifecycle of the SharePoint content moving it from top tier storage, through to lower cost storage, based on the rules provided by the organization's strategy.

"A Deloitte survey of more than 500 executives reveals that nearly 40 percent believe their data volume has grown to the point of being unmanageable."

—ARMA International IMN, September 2008

Bringing ***SharePoint*** into Compliance: Autonomy ControlPoint Highlights

With the ability to understand more than 1,000 file-types, Autonomy ControlPoint centrally manages any information asset and applies legal hold and disposition from across different SharePoint servers and other repositories on a company's wide area network. It delivers a broad set of functionalities specifically designed to address the information governance challenges with MOSS, including:

Seamless integration into SharePoint environment

Apply consistent Information Governance and eDiscovery across SharePoint and other corporate repositories with over 400 connectors and 1,000 file types supported.

Dashboard views enable automated information management

Customized dashboards provide alerting and transparency to information management processes within MOSS and throughout the enterprise, increase visibility and streamline governance actions such as legal hold and disposition.

Management of all SharePoint content in place

This eliminates the need to replicate content within SharePoint sites and from other servers. It also ensures that information related to a legal hold or regulatory matter is not accidentally deleted while in use.

Enhanced analytics, security and reporting mechanisms

Support for a rich feature-set on MOSS content such as clustering, faceted navigation and visualizations.

Improved performance

Reduce costs and improve performance over wide-area-networks by eliminating the need to store SharePoint data in SQL Server.

To Learn more about Autonomy ControlPoint, call 415.342.9955 or visit www.autonomy.com/controlpoint.

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Cutting Time:

Economy Gives IT a Sword For Slashing Software Costs

The global recession isn't helping IT budgets. But it provides users with an opportunity to gain a pricing edge on their software vendors. **By Eric Lai**

TECH BUDGETS aren't immune to the economic downturn. Market research firm IDC expects IT spending to grow just 2.6% worldwide and less than 1% in the U.S. next year. Gartner Inc. is even more pessimistic: Its latest forecast calls for 2.3% growth globally in 2009.

And last week, Forrester Research Inc. sharply cut its projected increase in U.S. IT spending for next year, turning the number around from 6.1% to 1.6%.

IDC analyst Mike Fauscette said he doesn't expect large users to engage in "wholesale stoppages" of critical IT projects. But he thinks that at best, many companies will hold spending flat in the months ahead.

The silver lining is that the current crisis may also represent an opportunity. For instance, 39 of 66 software vendors polled recently said they were flexible on licensing and pricing, according to Acresso Software Inc. Acresso, which sells software licensing and compliance monitoring tools, conducts an annual survey of users and vendors along with the Software & Information Industry Association (SIIA) and other groups.

So, how can you take advantage of what may be a once-in-a-career IT buyer's market, even with budget restraints in place?

1 Encourage price wars. Users should be in a good position to play vendors of ERP and CRM applications against one another and benefit from the competition, said Jim Geisman, president of MarketShare Inc., a software pricing consulting firm in Wayland, Mass.

A case in point is The Schumacher Group, which provides staffing and management services for hospital emergency rooms. CIO Douglas Menefee said most of his software contracts are up for renewal early next year. He plans to negotiate hard, since he expects vendors to be much more amenable to bargaining than they have been in the recent past.

"For the last three years, I've experienced a bit of 'the price is what the price is' attitude from sales guys," said Menefee. "I completely think the power has shifted to the buyer." For example, he said he's seeing "very aggressive pricing" from three vendors that are competing for a contract to supply Schumacher with a new human resources administration system.

2 Consider cutting software maintenance – but be careful. Discontinuing support contracts with software vendors can save corporate users some coin. "A lot of enterprises will say, 'You're not giving me anything anyhow, so kiss that revenue goodbye,' " Geisman said. "Customers feel they've been cheated, and in many cases, they have been."

But cutting maintenance could prove costly if you're dealing with vendors that take a hard line in such situations, according to Eliot Colon, president of Miro Consulting Inc., a Fords, N.J.-based firm that helps Oracle and Microsoft users negotiate and analyze software contracts.

Colon recounts the case of a semiconductor maker that dropped support for its Oracle apps two years ago but then found itself needing access to a mission-critical software patch. Despite offering Oracle Corp. a "six-figure flat fee" for the patch, the company was rebuffed, he said.

He added that after three months of negotiations, the chip maker agreed to pay Oracle several million dollars — the

Continued on page 16

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Continued from page 14

same amount it would have spent if it had left the maintenance contract in place.

3 Bring hard business data to the negotiating table. Sharing financial info and other internal data may seem like a surefire way to lose the upper hand in vendor negotiations. But some analysts suggested that when done in good faith, it is often more effective than simply claiming corporate poverty or making empty threats to migrate to rival products. Vendors that are good business partners will respond to calls for pricing that is more in line with the economic value users get from software, the analysts said.

Colon cited the experience of a large client in the retail industry. "They told Oracle they were in financial disarray and had a bleak outlook for the next year or two," he said. "Oracle didn't budge at all." But when the retailer went back to Oracle with data showing how low its usage of the vendor's software was outside of the 10-week holiday shopping season, Oracle responded by drawing up a less expensive custom contract, Colon said.

4 Look for concessions other than discounts. Microsoft Corp. last month announced a zero-percent financing promotion for new buyers of its Dynamics ERP and CRM applications. But for the most part, such deals have either "dried up, or the terms aren't going to be all that attractive," said IDC's Fauscette.

That's partly because of the tightening of credit markets. "Vendors used to be able to get you approved for several million dollars [of financing] if they just knew your name," Colon said. "Now banks are asking for audited financials and [checking business] references."

"For the last three years, I've experienced a bit of 'the price is what the price is' attitude from sales guys. I completely think the power has shifted to the buyer.

DOUGLAS MENEFEE, CIO, THE SCHUMACHER GROUP

So, what are some realistic concessions? One is asking vendors to provide free installation and training — something that Oracle, for one, has been agreeing to do, according to Colon.

Menefee said he has found that vendors are often willing to discount add-on modules or even throw them in for free. They have also become open to doing "a lot more legwork" on things such as evaluating Schumacher's business processes and how the use of software could save the company money, he said.

Users also might want to consider things that they would be willing to trade away as part of the bargaining process or would agree to do for vendors — such as appearing on trade show panels or talking about a product to the media.

5 Consider new types of licensing agreements. Another possibility is to push your vendor to tweak or overhaul its software licenses for you, as in the case of Colon's retailer client. That could involve adding a cloud-based subscription option to an existing perpetual-use license, or pushing a vendor to adopt concurrent-user licensing.

Sixty-nine percent of the 78 IT managers who responded to the Acresso-SIIA survey said they preferred the concurrent-user approach over per-seat or per-processor licenses. And 70% of the surveyed vendors said they expected concurrent-user licensing to be one of their primary pricing models by 2010.

Usage-based pricing may also be an option. Altair Engineering Inc., a maker of product life-cycle management (PLM) applications, is among the vendors that have adopted token-based, pay-per-use licensing schemes that let end users within a company share a pool of software licenses.

Tecosim GmbH, a German provider of computer-aided engineering services, has used Altair's token system for the past five years. Juergen Veith, Tecosim's managing director, said the tokens cover the use of Altair's own PLM software as well as integrated third-party products.

The token system "gives us a lot of flexibility," Veith said. "It lets us use the best software for each particular job." Using the tokens is also saving Tecosim money, he said, although he didn't disclose any hard numbers.

6 Switch to less expensive alternatives. Inexpensive or free desktop applications, such as the cloud-based Google Apps or open-source OpenOffice.org suite, have matured to the point where organizations might want to consider swapping out Microsoft Office, Fauscette said.

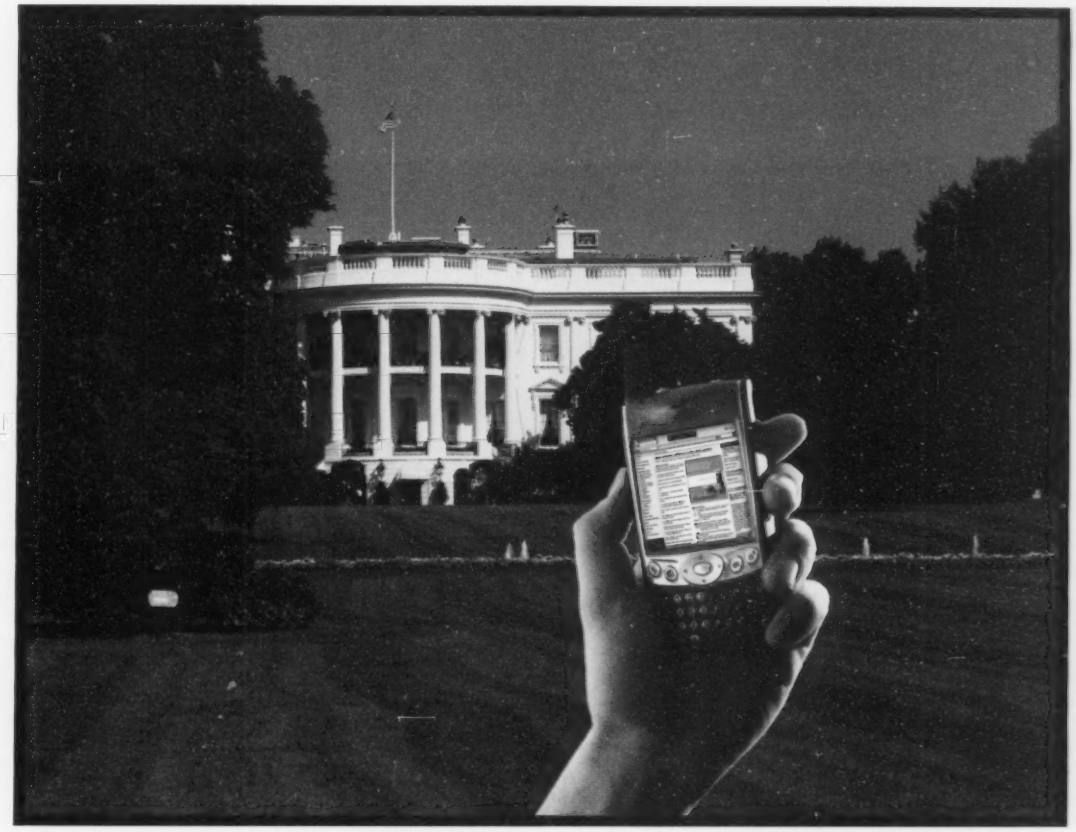
Similarly, you could look at dumping on-premises software for Web-hosted software-as-a-service offerings, he suggested. And third-party support vendors might be able to help lower your maintenance costs.

Manhattan Home Finance LLC in Manhattan Beach, Calif., faced a different kind of choice. It was locked into Lotus Notes for e-mail but desperately wanted to adopt Microsoft's SharePoint Server software for document storage and collaboration, said Nader Chahine, branch manager at the JPMorgan Chase & Co. affiliate.

Chahine found a product from Mainsoft Corp. that links SharePoint and Notes for $125 per user, enabling Manhattan Home Finance to adopt the former while avoiding a lengthy and expensive migration to an all-Microsoft software stack.

7 Look to smaller vendors, which may be more flexible – but also more risky. Fauscette noted that start-ups may face a slew of competitors or need cash, often making them a good source of bargains. On the other hand, overeagerness may be a warning sign. Fauscette said he would be leery of doing business with a vendor that "is willing to cut his price to almost nothing."

MarketShare's Geisman, meanwhile, cautioned that driving such a hard bargain could contribute to a vendor's demise or sour a business relationship. A wiser course of action, he said, is to strike a deal that is fair to both sides and then "make it clear to your vendor that you are choosing not to hammer them because you realize that we are all in this together." ■



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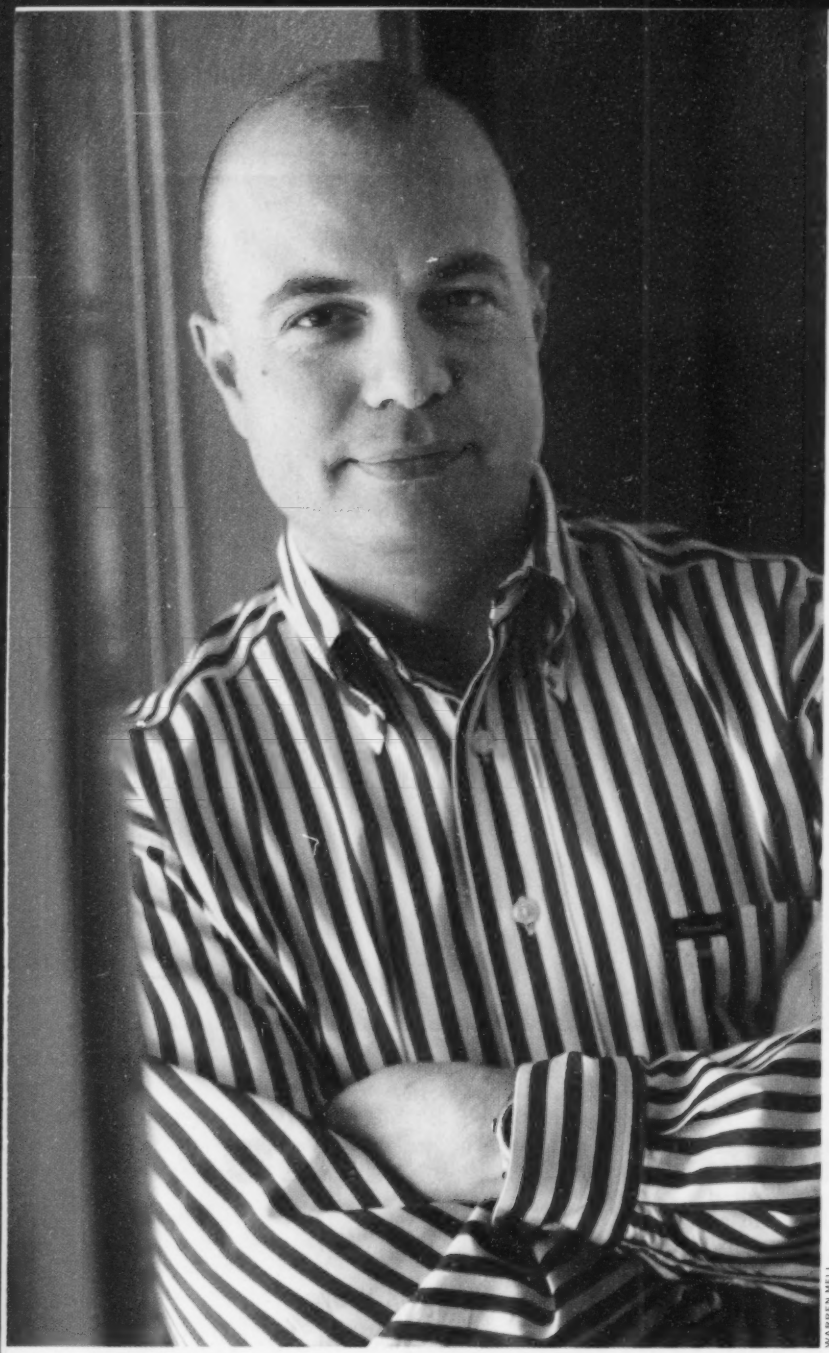

WARREN WELL

■ THE GRILL

Ben Wolff

Clearwire's CEO talks about **building out WiMax,** finding **the killer app** and **surviving** the recession.

Dossier

Name: Ben Wolff

Title: CEO

Organization: Clearwire Corp.

Location: Kirkland, Wash.

Most interesting thing people don't know about him: "I tried my hand at riding bulls and broncs and steer wrestling in college rodeos until I shattered my tailbone. Now I can't sit still too long or else it aches."

Favorite vice: Washington state cabernet and syrah wines

Pet peeve: People who are "all hat and no cattle."

Ask him to do anything but . . . "Compromise my principles."

Favorite band: The Eagles

Ben Wolff is CEO of Clearwire Corp., a WiMax wireless Internet service provider founded in 2003 by wireless pioneer Craig McCaw. Clearwire recently finalized a merger with Sprint Nextel Inc.'s WiMax business, and the newly merged company aims to roll out high-speed wireless service nationwide in the next two years, aided by a $3.2 billion investment by Google Inc., Intel Corp. and three cable companies. The WiMax service is already operational in Baltimore, and service in several other major cities is on the way.

What is the flagging economy going to do to your very ambitious plans for a national WiMax wireless rollout with Sprint and other investors? The great news is that we've got $3.2 billion of cash coming in. If that sounds like a lot, it is. We can last a long time on $3.2 billion. We don't have a huge amount of pressure to go out and get additional financing. We're well positioned to ride out the financial market storm. It would be different if we didn't have the [deal] with Sprint, Google and the cable companies for a joint venture to build the network.

What will it cost in total to build a national WiMax network? Close to the $7 billion range. But it's still a dramatically

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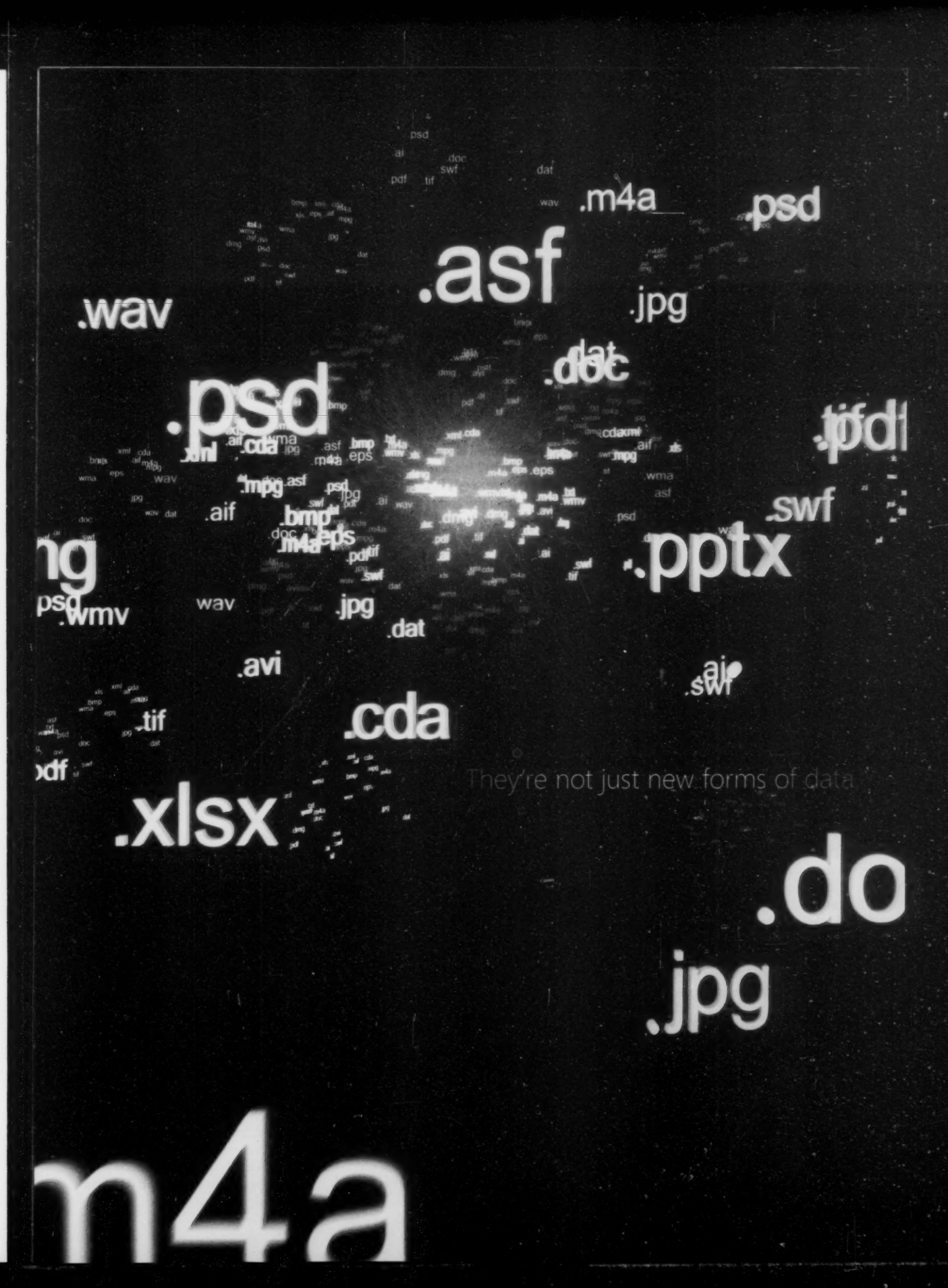
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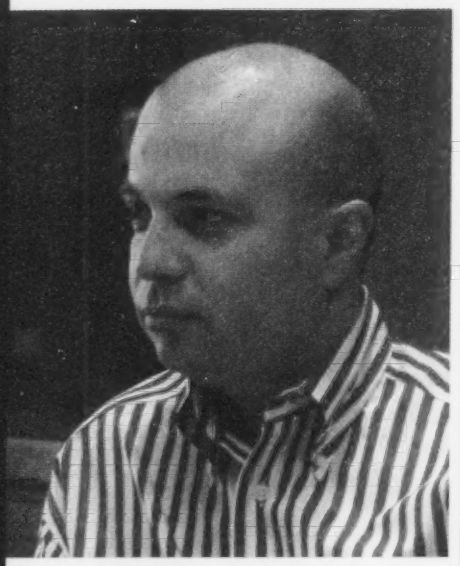

"I think the ability to have face-to-face communications – see body language – all that, will be a killer app.

Continued from page 18

lower cost than what you've seen in traditional cellular builds. And there are good reasons for that. We are using a flat, Layer 2 IP network architecture, much more simple than what you see in traditional cellular. Also, the equipment that goes on the cell tower is smaller, lighter, more compact. The costs are dramatically less.

What impact will the poor economy have on WiMax? Will a person in danger of losing his job pay for it? If you add up the cost for residential broadband for Internet [and] residential voice service, and then add on mobile Internet and mobile voice service, the average household today spends $150 to $300 per month. If Clearwire can offer you all those services for $100 to $125 a month — and that includes each of four people in your house with his own phone number that will work on any device, including the home phone — I think that winds up being a value proposition. And it will be a better experience.

The deal for the joint venture with Sprint closed Dec. 1. How is the integration going? Integration efforts bringing the two teams together are going very, very well. It is a big task. Challenges that mergers traditionally have include bringing the teams together. Clearwire has about 1,800 people, and Sprint has about 700 at Xohm, the WiMax division. It is not a small undertaking, but not as cumbersome as some mergers.

Google's involvement is intriguing. What's its role going to be? It's across the board. They and we are very aligned philosophically about the ability to deliver true broadband to the palm of your hand so it's available anytime and anywhere — that's good for their business and good for our business, and good for consumers. Second, their work on the Android platform is really groundbreaking, so we expect to have devices on our network that use Android — not exclusively, but as an option. In addition, Google is one of the most innovative companies out there today focused on how to bring the Internet to a smaller screen and to make it relevant in a mobile environment, with applications tailored to you as a consumer. We hope to do joint R&D for applications they are creating for the 4G network.

What will be the WiMax killer app? I hope there will be a number of killer apps. But one is live video chat.

Videoconferencing? That's got an enterprise connotation, but what I mean by video chat is where you are able to push a button, transmit and then see each other and talk to each other, real time, across the country. It's possible because WiMax has very low latency. I think the ability to have face-to-face communications — see body language, all that — will be a killer app.

Is there a corporate dimension to video chat where the boss talks to a worker or shares, say, training and product information? Yes, you're dead-on with those business applications. Plus, you could multicast to many workers, similar to push-to-talk from Nextel, but with video. Think about doing that nationwide. That has real utility.

So, is WiMax focused on consumers or businesses, or both? It really depends on the device you have. Clearwire before the merger [was] a mass-market broadband provider of mainly fixed WiMax to the home and small office, with nearly half a million subscribers. That's clearly a mass-market, consumer play, not targeted at the tech-savvy early adopter. But USB dongles or laptops with WiMax cards in them can provide real productivity tools for real estate agents or insurance agents or others who spend a vast majority of their time moving around in their local communities carrying laptops. And there are a lot of those people. Students are also a great market for USB WiMax cards or dongles. But the Nokia N810 is more for the early-adopter, tech-savvy type of user. We will target products for different segments of the population.

Is there a WiMax market for large business users? I think there is. Sprint teams inside the new Clearwire [will] go after that segment, while Clearwire [will] focus on others. WiMax is a very secure network.

And the timing for WiMax? We'll start by trying to have our network provided for 140 million by 2009 or 2010. Most of that will be top-100 markets with denser populations. We'll build in clusters. If you build Boston, you build surrounding areas of Boston as well.

Getting back to the economy – if things get much worse, what does it mean for the big picture for all kinds of technology companies, not just Clearwire? Current economic conditions are so dramatic in terms of the debt side of the financial markets that it can't last. We're finding that this is a world economy, which is more apparent than any of us realized. There are also regulatory and policy fixes. Those won't snap us out of a recession but will get us on the right path. Still, our intellectual property — inventing things, like software — has become our tremendous national resource.

— *Interview by* **Matt Hamblen**

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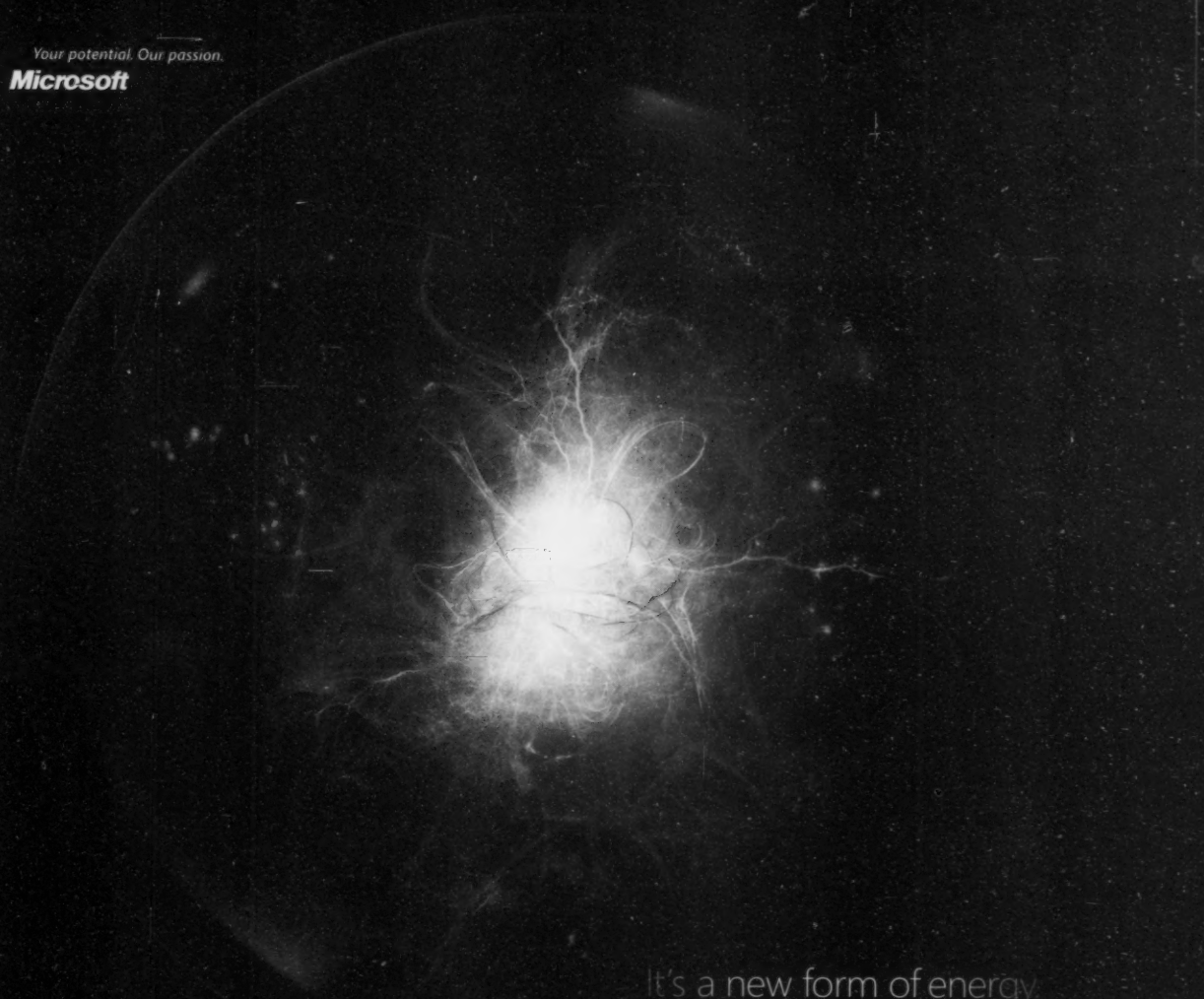

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Steven J. Vaughan-Nichols

Microsoft, Vista And the Big Three

FOR MORE than a decade, if you owned a PC, you ran Windows and, far more often than not, Internet Explorer was your Web browser. In fact, for a while, the only three things you could be sure of were death, taxes and Microsoft.

Things have changed.

For the first time since Bill Gates strong-armed PC vendors into installing Windows, the operating system has dropped below a 90% market share, according to a Net Applications survey of Internet users' operating systems.

That doesn't sound too bad, does it? Well, maybe you felt the same way back in the early '90s when Toyota and Honda started really ripping into the market shares of General Motors, Ford and Chrysler. And we all know how well American car makers are doing these days, don't we? Whether the Big Three get a bailout or not, most automobile industry analysts expect at least one of them, if not all three, to go bankrupt in the next two years.

The Toyota of the PC market muscling in on Microsoft's dominance is Apple. Mac OS X now has 8.8% of the market. Linux is far behind at not quite 1%. But with the growing popularity of Linux-powered laptops and netbooks from vendors like Dell, Lenovo and Asus, the open-source operating system is gaining ground at Windows' expense as well.

The news is worse for Microsoft in the Web browser market. Internet Explorer has sunk below a 70% market share. The winners here are Firefox, Apple's Safari and Google's still-wet-behind-the-ears Chrome.

Has Microsoft lost it? I think it has.

I believe that Bill Gates has been wrapped up in his foundation for a long time and retired in place long before he actually left his job at Microsoft in July. Just look at the Vista mess. After years of planning, Vista arrived as what I (and many others) would describe as an awful operating system. Not only that, but as the Microsoft transcripts from the Vista Capable lawsuit show, it wouldn't work with current hardware. What I find even more appalling than that — since I knew all along that Vista wasn't going to run well on standard PCs — is that Microsoft's executives were amazed at how bad Vista was.

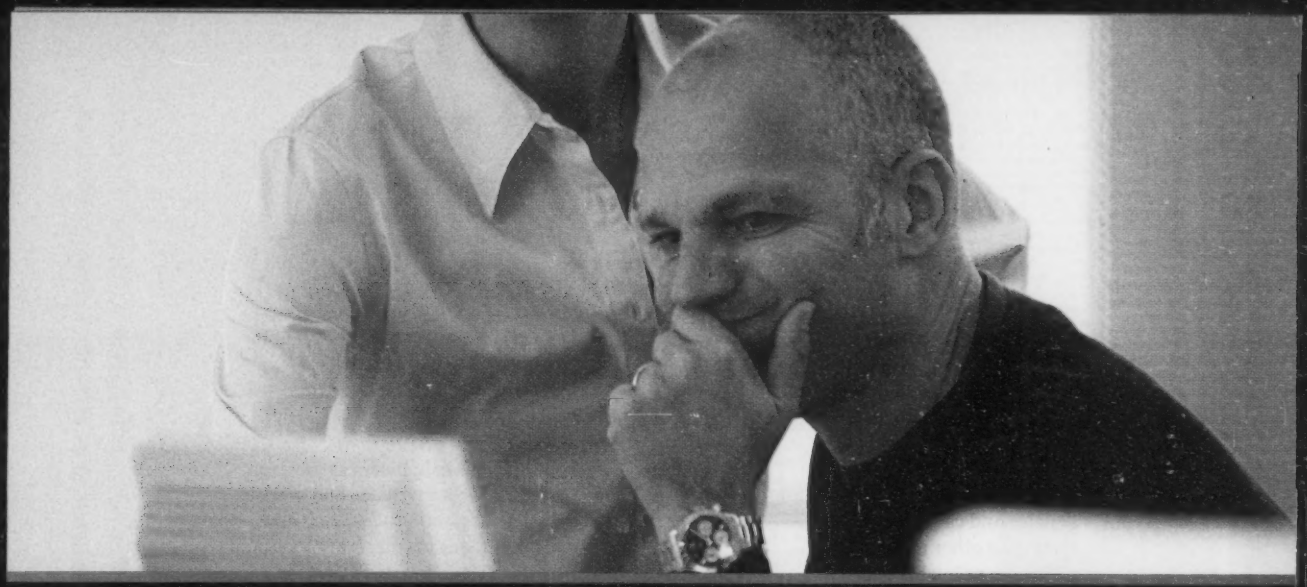
■ Microsoft might be where the Big Three were in the early '90s, when Japan started taking market share.

Don't take my word for it. Take Mike Nash's. Nash is corporate vice president for Windows product management. He told other Microsoft executives in an e-mail on Feb. 25, 2007, that "I personally got burned by the Intel 915 chip set issue that I bought PERSONALLY (e.g., with my own $$$)." He continued, "I know that I chose my laptop (a Sony TX770P) because it had the Vista logo and was pretty disappointed that not only wouldn't it run [Aero] Glass, but more importantly, it wouldn't run Movie Maker." Nash felt that he now had a "$2,100 e-mail machine." And, that, my friends, was from one of the guys who was supposed to be in charge of Vista!

Earlier this year, Gartner analysts said that Windows was "collapsing" and that Microsoft must make radical changes to Windows or risk it becoming a has-been. Windows 7, however, isn't the radical change Gartner prescribed. Under the hood and the hype, it's just warmed-over Vista. That won't do it.

With Gates long gone and the Google-obsessed Ballmer in charge, I don't think there's any real question about it. Microsoft has become yesterday's news. The only real question is how long its fall will take and how it will play out. ■

Steven J. Vaughan-Nichols *has been writing about technology and the business of technology since CP/M-80 was cutting-edge and 300bit/sec. was a fast Internet connection — and we liked it! He can be reached at sjvn@vnal.com.*



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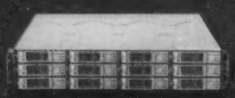

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THE Business CIO

Now more than ever, experience outside IT counts.

By Mary K. Pratt

DON R. RILEY knows what it takes to run a profitable business.

So during the past several months, as his company zeroed in on cash flow and bottom-line earnings to cope with the increasingly shaky economy, Riley knew he had to reorganize his department's priorities. He pushed up projects that delivered the biggest returns at the quickest pace, even if they were more expensive and carried higher risks than other initiatives.

Case in point: his decision to move on a complex $8 million business system implementation with a high return on investment instead of a $3 million one with lower expected returns.

Moving ahead with an expensive project at a time when most companies are tightening their belts might seem counterintuitive, but Riley, CIO at Mohawk Industries Inc., an $8 billion flooring company in Dalton, Ga., says it was right for his business. He knows this because he has experience running a business unit with its own profit-and-loss pressures.

"You have that different viewpoint when your career is on the line if you don't get it right, if you don't connect with the customers, if you don't bring a product that has value," Riley says.

Riley's path to the CIO role has involved much more than IT gigs. He has held business jobs, too, including sales and marketing and product management positions at Electronic Data Systems Corp. He's one of many top IT executives among *Computerworld*'s recent classes of Premier 100 IT Leader honorees who listed business-side jobs as a significant part of their professional experience.

Several of these IT leaders agreed to discuss the benefits of having a background in business. They say it has given them the ability to better understand the challenges

STEPHEN WEBSTER / WONDERFUL MACHINE

CIO

Business Experience Worth Getting

If you'd like to beef up your credentials for a CIO post, consider getting experience in these business areas:

Profit-and-Loss Responsibility
Why it's important: This shows you the pressures of delivering value to the company and helps you understand the consequences of failing to do so.
Where to get the experience: Running a business unit that deals with customers, such as a service organization, or an IT department that runs itself like a profit center.

Organizational Design
Why it's important: To handle organizational design successfully, you have to learn how to build a team and move people into the right places.

Where to get the experience: Project management positions and other managerial roles either inside or outside of IT.

Accountability for Whether Customers Stay or Walk Away
Why it's important: It gets you focused on whether you're delivering quality products and services. It helps you understand your customers and thereby helps you make your organization more customer-centric.
Where to get the experience: Working in a service organization or an IT department that measures and gives incentives on key customer metrics, or outside of IT.

Sales and Marketing
Why it's important: This will develop your ability to formulate and sell a vision that has value to customers. It also requires the ability to cultivate relationships, understand office politics, and identify an organization's key decision-makers and influencers.
Where to get the experience: Running a sales unit; leading a project.

Change Management
Why it's important: IT projects usually require business people to change the way they do their jobs, so IT leaders should know how to effectively manage both the IT changes and the human changes that a new system will bring about.
Where to get the experience: Project management, and operations and supply-chain management roles.

SOURCES: TIM RAMSAY, ASSOCIATE VICE PRESIDENT OF IT, UNIVERSITY OF MIAMI; DON R. RILEY, CIO, MOHAWK INDUSTRIES INC.; EDEN S. FISHER, EXECUTIVE DIRECTOR OF CARNEGIE MELLON UNIVERSITY'S ENGINEERING AND TECHNOLOGY INNOVATION MANAGEMENT PROGRAM; BARBARA T. GRABOWSKI, PROFESSOR OF MIS AND DIRECTOR OF THE MASTER'S IN MIS PROGRAM AT BENEDICTINE UNIVERSITY

and requirements of their companies as a whole, especially in this difficult economy. And that, they say, translates into technology projects that deliver stronger ROI and better support the company's goals and vision.

A DIFFERENT VIEW

"The opportunities for innovation often are made visible when someone has had different perspectives," says Eden S. Fisher, a professor at Carnegie Mellon University and executive director of its Engineering and Technology Innovation Management Program. "People who come from different experiences have the ability to offer new perspectives that could be of value."

That value isn't just esoteric. It can translate into real dollars and cents.

Tim Ramsay, associate vice president for IT at the University of Miami in Coral Gables, Fla., used his financial and business experience as the university's former director of business services when considering whether to upgrade a mainframe back in 2005.

During class-registration periods, Ramsay's IT staff saw usage spikes that made computers sluggish. But he resisted pressure to upgrade, opting instead to buy capacity on demand from vendors to cover those spikes. As a result, he says his department avoided incurring a $300,000 annual cost.

"We've been able to avoid major CPU upgrades by simply taking a variable cost approach and rethinking the paradigm of when we need to upgrade and when we don't," says Ramsay.

CEOs are indicating that that's the kind of business-savvy thinking they want in their IT chiefs.

When research firm Gartner Inc. asked the largest IT recruiters to discuss what their clients want in current and future CIOs, it found that they're increasingly looking for people with professional experiences outside of the IT department. Specifically, it found that senior executives want CIOs who have managed a non-IT business unit at some point in their careers.

"We've heard for a couple of decades that the IT delivery mechanism can be enhanced when driven by people who are more acquainted with the business. It's also very clear that that was inadequate for many, many companies. Therefore, they've raised the bar," says analyst Ken McGee, who wrote the January 2008 Gartner report "Meet Your Next CIO."

"You have that different view point when your career is on the line if you don't get it right."

DON R. RILEY, CIO, MOHAWK INDUSTRIES INC.

"Not only must you have experience from the business side," he says, "but now you have to have that profit-and-loss experience; you must really have guided a department or a division other than IT."

CIOs who have such experience have a business sense regarding what works and what doesn't, and regarding what should be undertaken and what shouldn't, McGee says.

"You have a capacity, which is very difficult to teach, that determines from the outset whether an IT idea is worth pursuing in support of the business or whether it's nice to have but won't do anything to improve the income statement," he adds.

Few CIOs today have had P&L responsibility, even though more companies are looking for it, McGee says. That type of experience is particularly important now, given the current economic volatility.

"This is a hugely turbulent environment, but business has to continue in the face of all that, so someone in IT — where expenses are not small and

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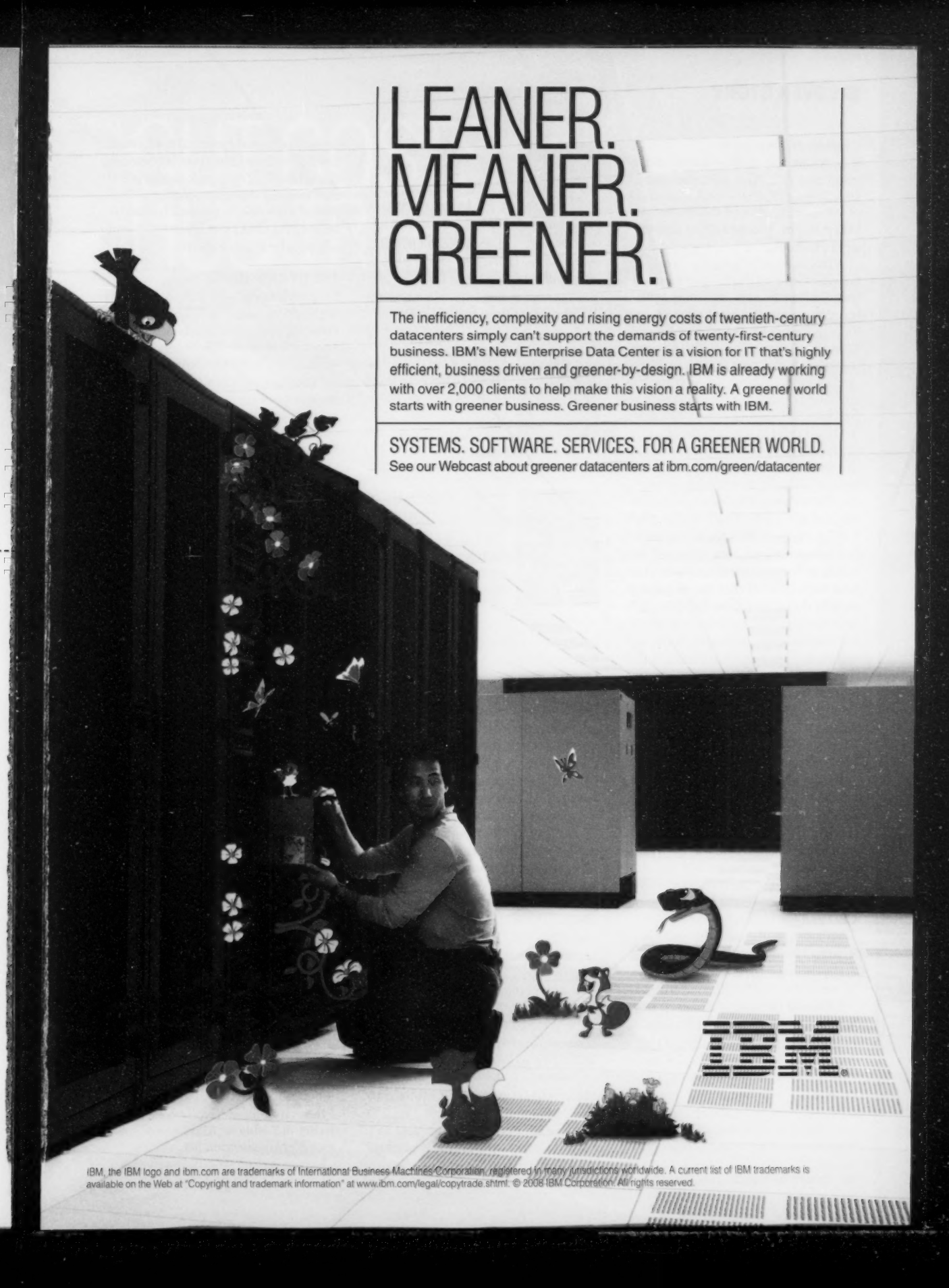
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Continued from page 26

impacts are not small — has to understand how IT can move the business," says Barbara T. Grabowski, a professor of MIS and director of the master's in MIS program at Benedictine University in Lisle, Ill.

While acknowledging that leaders who move up the IT ranks can do that, Grabowski says that those with broader experience bring a broader view that can help them formulate an IT strategy that best fits with an organization's wider agenda.

"Anyone coming up through any specific unit is going to have the same narrow view. If I'm an IT expert, I'm going to see everything through the lenses of IT, just as if I'm a financial person, that's the lens I'm going to have," Grabowski says. "But moving around the organization adds some dimension that a single, vertical path won't have."

Riley concurs. He says his experience in product management, sales and marketing gave him a perspective on business requirements that can be gained only by doing such jobs. Specific skills he honed in those roles include building relationships, packaging a vision and communicating that vision's value.

GOING DEEPER

But business-side experience is about more than developing certain skills, Riley says. It's about understanding what makes the business tick.

As a product manager, for example, he had to have a constant focus on service because the customers could leave if they were unhappy. Riley says he had to make sure he was delivering value to those customers but also providing a profit to the company. And he had to learn to present his ideas to his CEO and the board.

"Those are all great skills you can get in some IT organizations, but you generally don't get them to the degree you do when it's your livelihood," Riley says.

Consider the case of Robert J. Dowd, who says his business and finance background landed him the CIO job at Sonora Quest Laboratories LLC over candidates with much stronger IT experience.

"I came into the CIO job during a very difficult situation, when people were questioning whether this [company] would survive," says Dowd, who had been Tempe, Ariz.-based Sonora Quest's director of revenue service prior to his promotion. "And I perceived that what they needed was someone who could speak to the business and articulate to the board the things we needed to do to turn around."

"We've been able to avoid major CPU upgrades by . . . rethinking the paradigm of when we need to upgrade and when we don't.

TIM RAMSAY, ASSOCIATE VICE PRESIDENT FOR IT, UNIVERSITY OF MIAMI

"I perceived that what they needed was someone who could speak to the business.

ROBERT J. DOWD, CIO, SONORA QUEST LABORATORIES LLC

"That's the bottom line: being a good leader.

PETER R. WALTON, RETIRED CIO, HESS CORP.

Dowd says he understood the company's financials well beyond just how the IT budget fit into them. That understanding helped him persuade other senior executives and the board to spend millions of dollars in 2001 to replace outdated systems, despite the sagging economy. He positioned his request in financial terms because, he says, "you're not selling the architecture, you're selling the concept." He told them it would improve costs and deliver returns.

"Convincing people to spend more money when we're already losing money wasn't easy to do," Dowd says. "But coming from the finance side, I knew how to justify it, and they knew — because I came from the finance side — that I don't ask for things that I don't need."

Although Dowd had never held an IT position before becoming CIO, he says his lack of formal technical credentials has not hindered him from successfully doing his job. (During his tenure as CIO, the company experienced double-digit annual growth.) To get the IT expertise he needs as CIO, Dowd surrounds himself with technical experts.

THE HYBRID IDEAL

Nonetheless, not all companies are seeking business leaders to lead IT, says John Estes, vice president of strategic alliances at Robert Half Technology, an IT staffing firm in Menlo Park, Calif.

"You have people who say the CIO doesn't need any technical background. I think that's too extreme," he says. "The people in the trenches say the CIO doesn't need to know exactly what they're working on but that they'd like him to have an idea about what they're doing."

Gartner found in its CIO survey that more companies are looking for candidates who came up through the IT ranks but spent time in business, or for business executives who have a deep knowledge of IT. More important, perhaps, they're looking for candidates with leadership skills — which transcend any one particular job title.

Peter R. Walton, who retired in April as vice president and CIO at Hess Corp., says he firmly believes that.

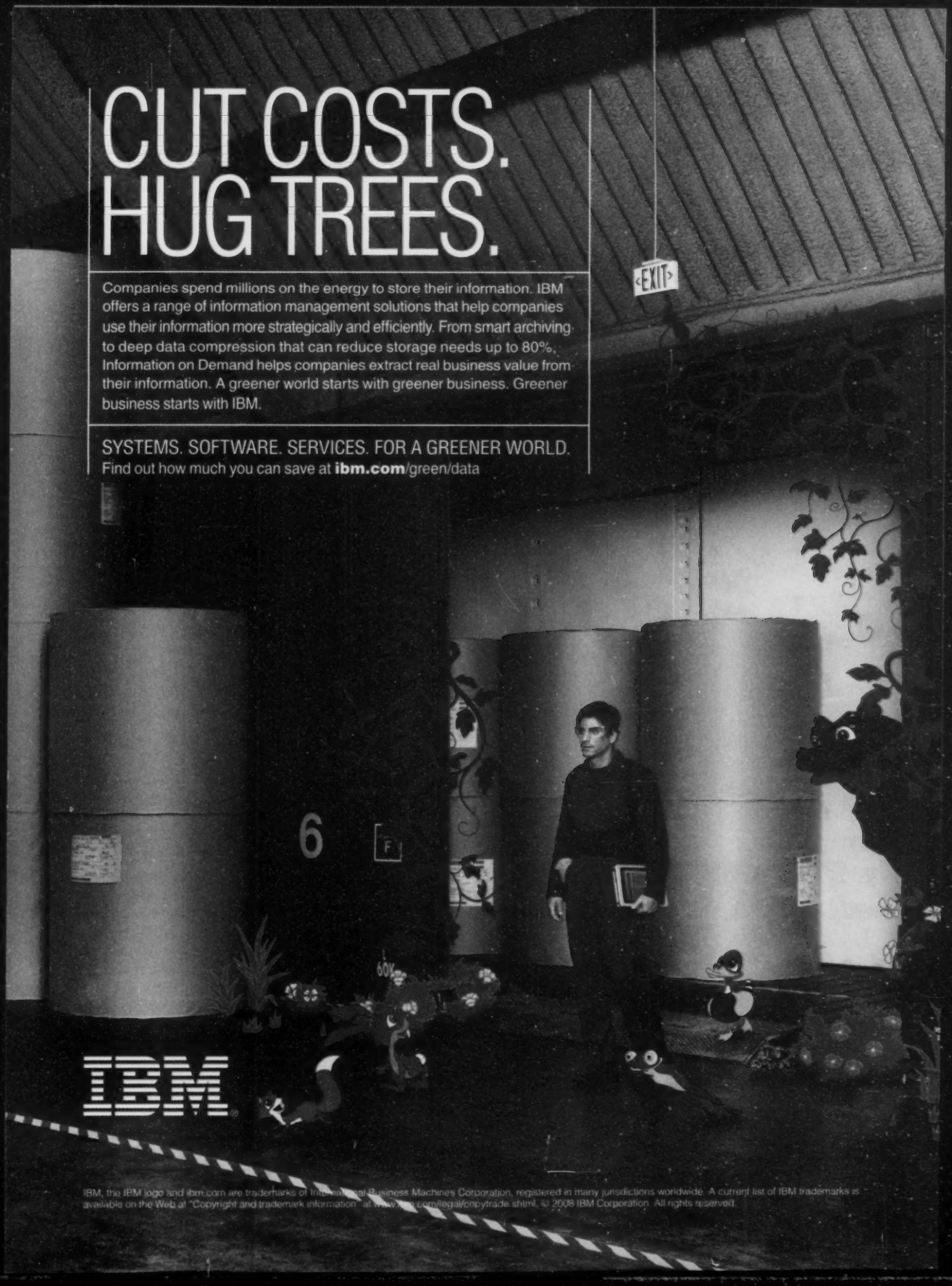
Walton, a former Navy pilot, spent 15 years working at and later running a small manufacturing company in New Jersey. Following his time there as CEO, he became director of IT structure and operations and then CIO at Hess, an energy company in New York.

He says his work at the manufacturing company gave him a deep understanding of business financials, human resources and management — all of which made him a better CIO.

Moreover, he says his past experiences taught him how to lead — how to focus on what would make the company, his boss and his team successful, without telling them that that was what he was doing.

"Whether you're coming up from IT or through the business ranks," he says, "I think that's the bottom line: being a good leader." ■

Pratt *is a* Computerworld *contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.*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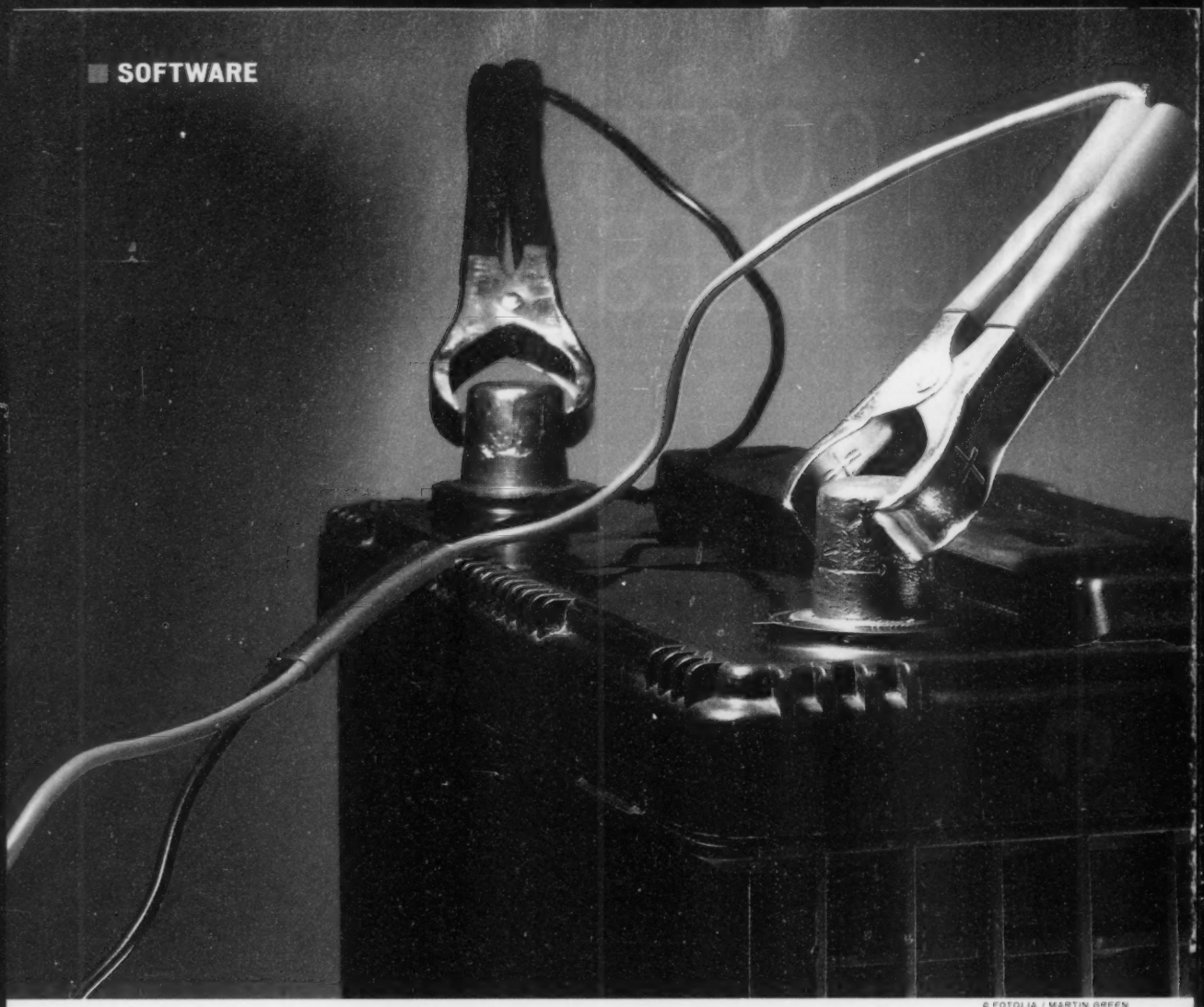

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Energized BY Open Source

A new approach spurs growth for BlueStar Energy Services.

By Thomas Hoffman

SIX-YEAR-OLD BlueStar Energy Services Inc. doesn't have the kind of systems-baggage that saddles many older organizations. Still, the Chicago-based company found itself hindered by the rigidity of its core systems, which constrained its efforts to expand its customer base and offer new services.

Those barriers to growth led the company to embark on a bold effort to replace the bulk of its IT infrastructure — including voice, e-mail and financial systems — with open-source software. The initiative has been so successful that CEO Guy Morgan attributes much of the company's recent growth to it.

BlueStar's open-source push has been driven by Tom Keen, the company's chief technology officer since June 2006. While evaluating BlueStar's IT architecture and business systems as a consultant, Keen had seen an opportunity for open-source systems to provide the company's operations with greater flexibility and scalability while strengthening its ability to expand into new markets.

Continued on page 32

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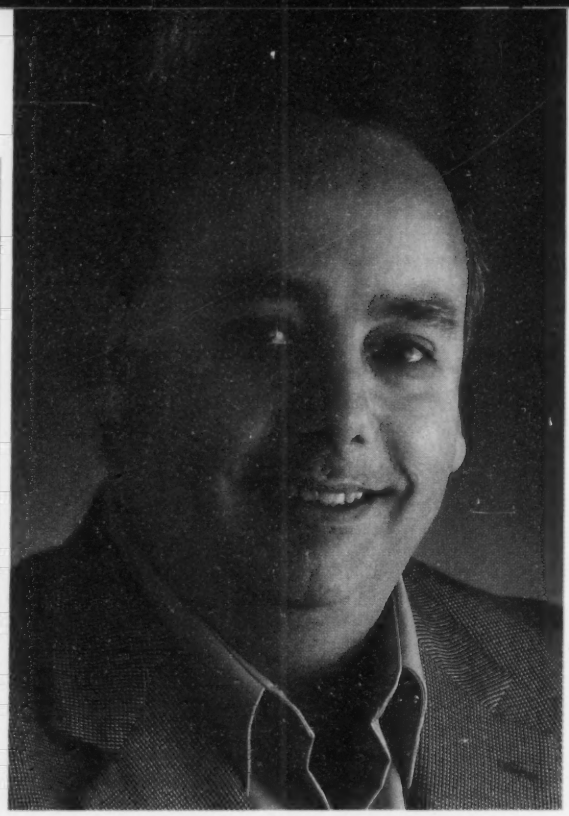
Continued from page 30

For example, the ERP system, which was written in Macromedia Inc.'s ColdFusion, suffered from scalability constraints. BlueStar supplies electricity to customers in Illinois, Maryland and Washington, D.C., and needs to gather heaps of customer meter data for billing. The company was paying third parties for electronic data interchange (EDI) data feeds, and batch-processing billing runs often kept BlueStar workers on the job late into the night. The system, which operated on a Dell server running Windows 2003, was "pushed out to the edge," says Keen, and that restricted the company's ability to expand its customer base.

"The most pressing concern for me was the rigidity of the ColdFusion system," says Morgan. "Our business is in a very fluid regulatory environment. Things change all the time, and our infrastructure has to adapt to those changes. I felt like we were constantly putting a Band-Aid on the problem."



"[The CEO] trusted what we were doing, but his trust had a rope with a noose on the end of it.

TOM KEEN, CIO, BLUESTAR ENERGY SERVICES INC.

THE OPEN-SOURCE PITCH

Even though Morgan recognized the shortcomings of his ERP system, Keen still had to sell him on the merits of shifting the IT architecture to an open-source approach. "Guy couldn't understand why, if open-source technologies are so good, you could just give it away," says Keen. "He just didn't get it."

To help convince Morgan, Keen had him visit a Web site for SugarCRM, an open-source CRM system that boasts a number of Fortune 2,000 customers.

"The thing that convinced me is that a number of well-established companies were adopting [open-source] technologies early on," says Morgan, noting that open source "started to make sense to me."

Still, Morgan's confidence had its limits. "He trusted what we were doing, but his trust had a rope with a noose on the end of it," says Keen.

In November 2006, Keen and his team began developing a prototype for a new e-commerce and billing engine that would be part of an open-source initiative called NextStar. The system would support BlueStar's customer enrollment, billing, e-commerce, accounting, cash management and other financial operations.

But BlueStar executives wanted more, says Keen. They ordered up a comprehensive system that would enable the company to offer unique services to its customers, such as the ability to analyze their own energy consumption.

Such services are important to smaller retail electricity suppliers, says Zarko Sumic, an analyst at Gartner Inc. "[They] need to develop a portfolio that's equivalent to what the large players have," he explains.

The project team initially focused on identifying and streamlining each of the core business processes that would be handled by the NextStar system, including integration with third-party payment providers, such as PayPal Inc. and Bank of America Corp., and receipt of metered data from Commonwealth Edison Co. and other utilities, says enterprise architect Guillermo Tantachuco. "The key was to think big, start small and show early value," he says.

For Tantachuco, those efforts began on the day he joined the company in July 2006. On that day, Morgan informed Tantachuco and other project team members that they needed to develop a customer enrollment system that would go live by October. The group developed a click-through prototype by mid-September and had the production-ready version completed by the end of the month, Tantachuco says.

Keen, Tantachuco and other members of the initial four-person project team used a variety of open-source and commercial technologies to build out the functionality and support in the NextStar system. Among them were Project Open's project management tools.

But the framework for BlueStar's IT architecture was developed using open-source Java software from SpringSource Inc. The company selected SpringSource's offering based on its cost, platform independence and breadth of enterprise-class features, Tantachuco says. Moreover, the San Mateo, Calif.-based Java vendor had "a road map of where they'd be in three years, and that mapped with our plans."

Most of the Java frameworks that BlueStar evaluated didn't meet its selection criteria, which included consistent architecture and design across different layers of systems, flexible and extensible APIs and security across all architecture layers, says Tantachuco.

SpringSource's modular architecture and design has enabled BlueStar's IT

Continued on page 34

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BlueStar's Open-Source Technologies

Here are some of the tools that BlueStar is using:

- **SpringSource's Application Platform**
  www.springsource.com/products/suite/applicationplatform
- **The OpenUP application life-cycle management methodology**
  www.eclipse.org/epf
- **Selenium Web application testing systems**
  http://selenium.openqa.org
- **Apache JMeter for stress load testing**
  http://jakarta.apache.org/jmeter
- **JUnit testing framework**
  www.junit.org
- **Project Open project management software**
  www.project-open.com
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Continued from page 32

staffers to develop systems throughout the company's enterprise architecture, including Web, database, messaging, business process management and supply chain integration systems, says Tantachuco.

To aid in the software development, Morgan authorized the creation of an application development center in Lima, Peru, in January 2007. BlueStar settled on Lima because there's only a one-hour time difference between it and Chicago, the city has a sizable population of IT professionals, and its infrastructure has improved dramatically in recent years, says Selyn Chavez, a systems architect who works in the development center there.

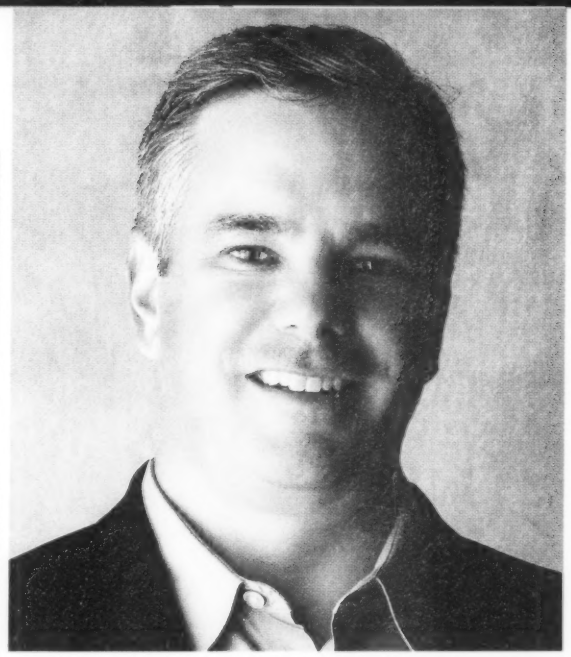
Keen set an aggressive timeline for the 25-person project team (including the first set of Lima-based developers) to build a new IT infrastructure for the company within a year. The use of the SpringSource framework kept the project moving briskly, since the design of the software enabled the project team members to view each of the system components that their colleagues were working on, says Keen.

But there were difficulties. "Open source always has some thorns in it, but so does commercial software," says Keen. One of the biggest challenges, he says, was simultaneously "rowing, bailing and building the new boat."

The IT organization was faced not only with building a new enterprise platform, but also with maintaining the existing platforms while building a strategic plan to seamlessly migrate to the new system and replace third-party vendors, Keen explains. "Not only did we have to revamp the entire infrastructure, but also revamp all best practices and standard operating procedures," he says. "This required extensive planning, coordination and collaboration with our business team members."

It also required "many early mornings, late evenings, and long weekends, but the results were well worth the time investment," Keen adds.

And that investment ended up being far less than it might have been. Keen says that the aggregate code count for the NextStar system is about 40,000 lines — a fraction of the 5 million to 6 million lines that one consultant estimated it would take to support BlueStar's business requirements.



"I felt like we were constantly putting a Band-Aid on the problem.

GUY MORGAN, CEO, BLUESTAR ENERGY SERVICES INC.

DELIVERING THE GOODS

BlueStar's investment in open source cost $2.5 million to $3 million, including new Dell servers and the Lima development center, says Keen.

Pinpointing the return on investment is difficult, because there are many intangibles, says Morgan, but the numbers are overwhelmingly positive. For example, he says, "if you look at our revenue growth from 2002 to 2007 [from $2.4 million to $171.1 million], you see a big jump toward the end of that, and a lot of that is attributable to the development of these new systems."

Since Keen and his team delivered the initial version of the NextStar system in February 2007, operators in BlueStar's bill-processing center have been able to obtain customer meter data and generate electronic bills within seven minutes instead of the eight hours it used to take under the batch-processing system, says Keen. Those processes have been streamlined, in part, by eliminating the use of two third-party EDI vendors. By handling those functions in-house, says Keen, the company is saving $100,000 to $150,000 per year.

And by replacing the ERP system and a host of others, Keen expects to save $25 million in software license and maintenance fees over the next five years based on current production loads.

Keen says that though the exact ROI numbers are illusive, the payback from open source is undeniable. "I tried sitting down and putting together an ROI analysis," he says, "and it was surreal." ■

Hoffman *is a former* Computerworld *national correspondent. You can contact him at tom.hoffman24@gmail.com.*

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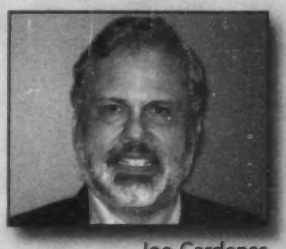

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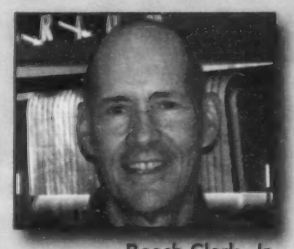

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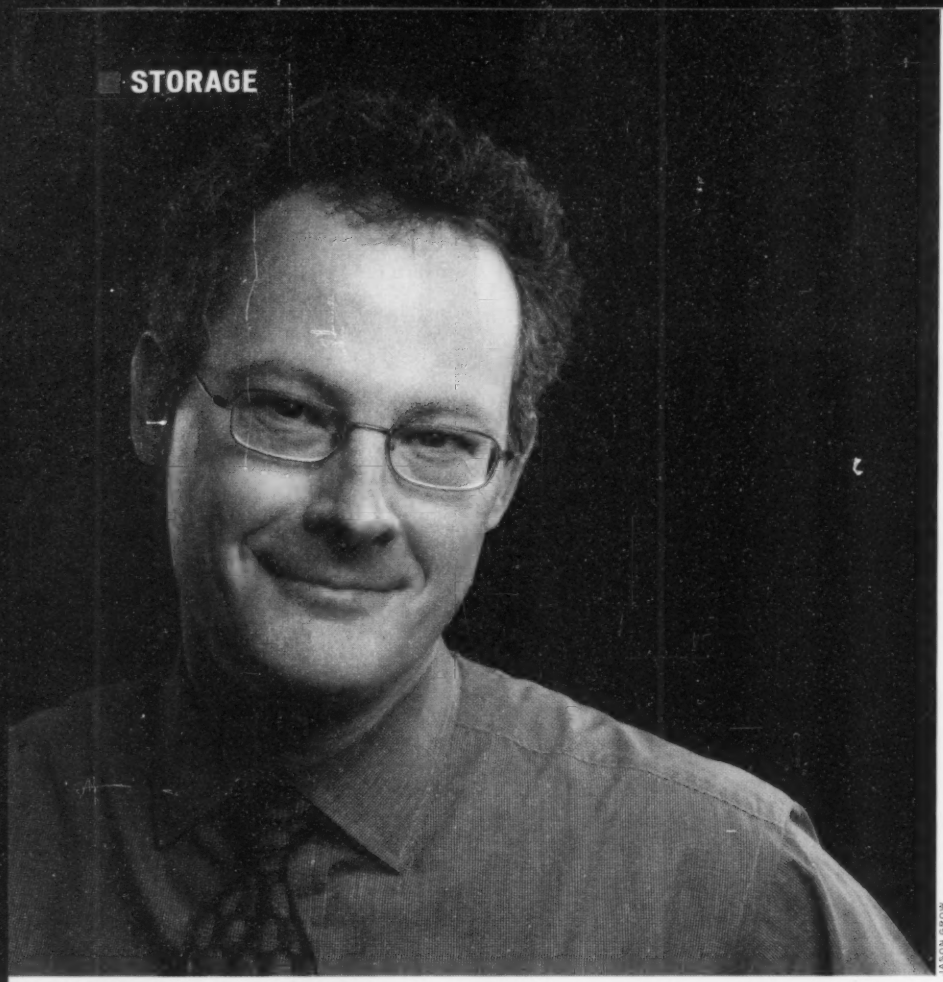

JASON GROW

'The Big Switch' to Cloud Computing

Nicholas Carr touts reliability but fears vendor lock-in.

CLOUD computing may be the answer for organizations looking to boost their server and storage utilization rates without increasing the workforce supporting those systems, says **Nicholas Carr**, author of *The Big Switch: Rewiring the World, From Edison to Google* (W.W. Norton, 2008). Carr told Thomas Hoffman that he thinks the cloud will enable companies to lower their capital equipment costs and reinvest IT money in other areas, such as new product development.

Why should Fortune 1,000 CIOs trust the reliability of the cloud? If you look overall at the records of Amazon.com and Salesforce.com, they're actually quite good. But they're not perfect, and I don't think they'll ever be perfect, any more than any company's internal systems are. But I think what we're going to see is that over time, the reliability of these cloud systems is going to steadily increase. And eventually, if not already, they're going to be more reliable than the average company's systems are.

We'll see different things move to the cloud in different stages, and one of the criteria will be, "How reliable do you need this system to be?"

For instance, I was speaking a few weeks ago to some federal government CIOs, including some from the intelligence community, and it's pretty clear that there are some sorts of systems that need to be basically bulletproof. And I think it's going to be a long time before companies and governments are going to trust those types of applications to the cloud. But from what we've seen already, whether it's Amazon's infrastructure or various software-as-a-service offerings, even now, the reliability is good enough for a lot of corporate applications.

Another top concern among IT execs is how to avoid getting locked into a particular vendor's cloud service. I think buyers should be worried about lock-in. If we're going to have the kind of interoperability and standardized data formats necessary to ensure fairly easy migration among vendors, it's going to have to be the buyers pushing the vendors to move in that direction. Unless the buyers make that a demand for doing business with a vendor, I fear that we'll see a lot of vendors — even if they talk a good game about standardization — actually pursue strategies to make it hard to get off their clouds, to quote Mick Jagger.

How concerned should CIOs be about the possibility of Microsoft, Google and other heavyweights coming to dominate the cloud? When we look

Continued on page 38

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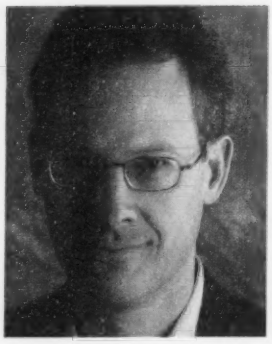
Continued from page 36

ahead and try to figure out the ultimate structure of the cloud or the computing utility industry, there are a lot of open questions. But when we look at the infrastructure side, it certainly appears to be a very capital-intensive operation. So we're seeing companies like Google and Microsoft spending billions of dollars a year, and that leads me to believe that because of the capital expense of building these networks, there's going to be a relatively small number of suppliers who can afford to build them out.

So that in itself raises some red flags. But another question is, what about the services, the applications that ride on top of that infrastructure? Will that remain sort of a separate business with lots of providers competing? Or will the Googles of the world suck up those applications as well?

Will we see a small number of vendors holding power over both the infrastructure and the applications? I don't really know. Regulations will play some part in it — and also the ability of a company like Google to innovate in a way that's attractive for businesses, which it really hasn't done much of yet.

How do CIOs make "the big switch" without decimating their IT staffs and placing their own jobs at risk? One of the advantages of the cloud is that it allows you to not only reduce your capital expenditures in IT but to reduce your IT staff. And if it didn't, it wouldn't be that attractive, because IT labor costs are such a big part of IT costs. So as CIOs look ahead, they should come to grips with the fact that this may mean that their empire may shrink.



"As CIOs look ahead, they should come to grips with the fact that their empire may shrink.

On the positive side, as the head count shrinks, their visibility and importance to the business may increase as they move away from managing the machinery and the applications and the licenses to focusing more on the business logic [see related story, page 24]. But if you go into it thinking, "I can only do something that allows me to maintain my current staff or to expand my staff," you're probably going to run into roadblocks with the cloud pretty quickly.

Some companies that have outsourced their IT operations still retain staff in-house to work with outsourcers and users. Would you expect to see the same type of model playing out in the cloud? I think so. Cloud computing is a form of outsourcing, using outside suppliers. And I think it will tend to have that same effect on IT shops. There will be some kind of information systems broker who, similar to the people who manage outsourcing relationships, figures out how we distribute our systems and our requirements and applications among these cloud providers.

You still need somebody to make the connection between the business and the application, though in a radical scenario, that job may move outside the IT department and into the businesses themselves.

How should CIOs change the way they approach IT in light of the troubled economy? Clearly — and this is something that CIOs have gotten used to this decade, for better or for worse — cost is going to continue to be a big factor. I think the judicious use of the cloud can help in that [regard], because it does allow you to avoid capital investments, which can be very hard to make a case for now.

Running counter to that, companies tend to get very conservative in periods of economic tumult, and even experimenting with new models such as cloud computing may begin to be difficult. But compared to a few years ago, there are more options now for getting more IT capability at the same or a lower price. Companies shouldn't be afraid to explore those options and experiment with them.

Might recent investments in virtualization keep large companies from making a wholesale switchover to cloud computing, at least in the short term? I don't think big companies are going to make a wholesale switchover to the cloud, because I don't think the cloud is ready for all the things that companies do internally in IT.

But I think virtualizing your own IT infrastructure is going to make it easier in the long run to pull in more and more capabilities from the cloud, or begin to use the cloud as basically an extension of your own data center — so that every time you get an upsurge in demand for a particular application, you're not faced with the need to go out and buy a lot of new servers. You can use the cloud as kind of an add-on and expand to it.

You were interviewed on *The Colbert Report* recently. What was that like? I watch the show a lot, so I kind of knew what I was getting into. But my wife was like, "Don't do it! Don't do it!"

The producer told me to make a few points, try to be serious and clear, and try to ignore [Stephen Colbert] because he's going to try to play off you and trip you up. And that was good advice. It was fun, actually.

You've said that Google has made us all "stupid." But some research suggests that the Internet may stimulate some neural activity. I think [it] can do both things. The study you're talking about showed that when we use the Internet, a lot of the areas of our brains are active, including decision-making parts that aren't very active when we read. But [I wonder about] the quality of thinking that's going on in your brain. [If] so many areas of your brain are activated when you're online, does that hinder the type of concentration and reflectiveness that occurs when you're sitting quietly reading? ■

Thomas Hoffman *is a former* Computerworld *national correspondent. Contact him at tom.hoffman24@gmail.com.*

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A Security Wish List for Fiscal 2009

There's no budget for **new tools,** but they're needed. Some things can be done **on the cheap,** but others are just **wishful thinking.**

MY TEAM has spent the past couple of weeks on 2009 budget planning, and it's been a real adventure, given the economic climate. We basically have no money to spend on any new technologies or head count, and I'm sure plenty of you are in the same boat. So, how do we move forward without funding? It's going to be tricky.

One option is open-source software. My company has always been reluctant to use free software — even banning it in a semi-official way until just recently. Objections have been based on the perception that open source is unreliable, would require dependence on a few key people with the expertise to support whichever tools we might use, and would generate high support costs. But now the company's stance has gone from "No open source" to "Demonstrate that open source will save us money." In this economy, money talks.

I think I can demonstrate the cost savings for some open-source security tools, especially since maintenance costs for commercial software are skyrocketing. Some vendors have increased their maintenance charges by as much as 35%! And a lot of the time, that's for some really poor support.

On my wish list for 2009 is better intrusion detection and reporting. We currently use a commercial intrusion-detection system that, while not well tuned, seems to be working fairly well. But the maintenance renewal cost is excessive. I could save the company hundreds of thousands of dollars by replacing the IDS with an open-source product that is almost exactly the same, except that it wouldn't provide automatic updates and update releases would be less frequent. I can live with that trade-off, even though it means building replacements for all of our existing IDS sensors.

■ The company has gone from 'No open source' to 'Demonstrate that open source will save us money.' In this economy, money talks.

I'm more concerned about how we're going to manage a new IDS, especially since we don't have a SIEM (security information and event management) system. There is no way I'm going to get funds for a commercial SIEM system, so I'll have to find a way to build our own or come up with an open-source alternative.

PLUGGING LEAKS

Another priority is data leak prevention (DLP). We've known for a long time that the company is losing huge amounts of client information, some of it confidential. It's not generally getting out into the wild, but it is getting into employees' Web mail accounts and onto USB devices. So, my department has been agitating for a DLP system for the past few years. However, the systems are expensive and cumbersome, and they take years to deploy and tune, so we haven't been able to garner a lot of support for the idea. This will be a hard problem to solve. It would be tough even if funding were unlimited.

I'd also like to have something that could find every device on our network and report on its security compliance. You can't secure what you don't know about, right? I'll try to sell this idea — and not for the first time. I expect to hit a brick wall again, but what else can I do but keep pushing?

Finally, I'm hoping to get funding for a third-party security audit. I'm a big believer in such reviews, for three reasons: They provide a second set of eyes to help ensure that we don't overlook anything important; third parties generally use frameworks to help provide a foundation for their recommendations, which helps us justify the remediation; and third-party reviews help when it comes to prioritizing security efforts.

Certainly we need more than I can hope to get this year, but any part of my wish list would help make us more secure than we are today. Wish me luck. ■

This week's journal is written by a real security manager, ***"J.F. Rice,"*** *whose name and employer have been disguised for obvious reasons. Contact him at jf.rice@engineer.com.*

Trouble Ticket

AT ISSUE: It's budget time, but in this economy, there's no money.

ACTION PLAN: See what we can do with open source, and keep pushing for the things we really need.

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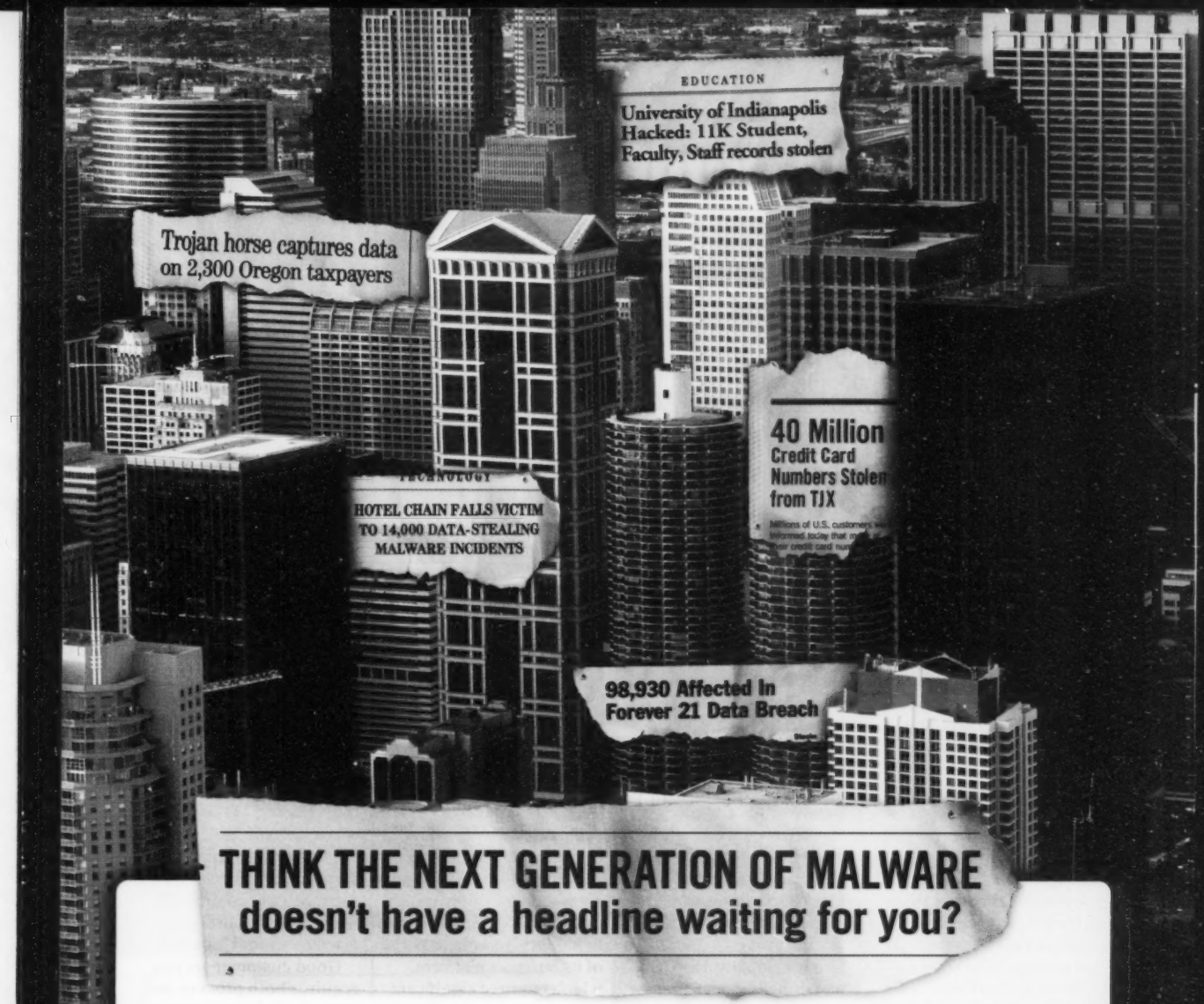
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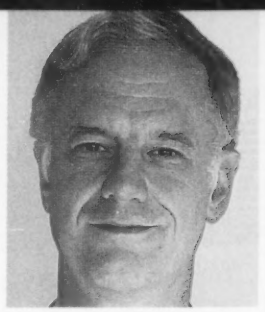
■ OPINION

Bart Perkins

Good Customer Service Isn't Just About Customers



A COUPLE OF MONTHS AGO, I described the incredibly poor customer service I received from several technology vendors ("Customer Disservice," Oct. 20). Based on those experiences, I will probably never buy from those vendors again. Last month, I purchased a new laptop, which failed and has been replaced — twice. Despite my frustration, I was impressed with the excellent customer service I received from Office Depot's technical support specialist, and that experience got me thinking.

Not every business can afford to offer customers Ritz-Carlton-level service. But even companies that compete on "lowest price" recognize that they must provide basic customer support or buyers will go elsewhere. The smartest IT shops also know that good customer service affects how the corporation perceives and interacts with them. Here are just a few of the ways:

■ **Executive team respect.** Business executives expect highly reliable support for their IT systems. Providing good customer service will not guarantee respect for IT, but poor service creates the impression that IT is uncaring and unresponsive to business needs. Negative perceptions can lead to IT being excluded from strategic business discussions.

■ **Political capital.** When problems arise, IT is expected to communicate frequently and provide personalized assistance regarding any unresolved issues. How IT responds to problems can either add to or subtract from its political capital. After one Fortune 500 company's BlackBerry server failed, its well-respected IT department called every BlackBerry user to ensure that each device was operating properly. At a different company, the CEO had difficulty receiving e-mail on his BlackBerry. Customer service took three days to return his call, then simply stated that he should remove and reinsert the battery. This interaction severely eroded IT's political capital.

■ When IT is perceived as a partner, a late or over-budget project is more likely to be perceived as a company problem rather than an IT problem.

■ **Shared problems.** IT organizations that provide excellent customer service build bridges between the business and IT and foster cooperative partnerships. When IT is perceived as a partner, a late or over-budget project is more likely to be perceived as a company problem rather than an IT problem. One Fortune 500 company with an excellent IT department launched a program to modernize a major part of its business platform, which required significant systems renovation. Five years later, the program was significantly late and over budget. Despite software difficulties, the executive team rallied around the CIO and took joint responsibility for the program's overruns.

■ **Customer retention.** Satisfied customers are usually repeat customers. Internal departments that are unhappy with IT are more willing to listen to sales presentations from outsourcers, software vendors or systems integrators. They are also more likely to select a new software platform or establish new project directions before IT is invited to participate.

■ **Employee retention.** Customer-focused organizations usually treat their employees as fairly and respectfully as they do their customers, resulting in a motivated and stable workforce. Organizations that mistreat customers generally mistreat their employees, too, often resulting in high turnover. Turnover is expensive. The U.S. Bureau of Labor Statistics estimates that replacing an employee costs one-third of his total compensation. In addition, the number of college graduates earning computer-related degrees is decreasing, while aging workers in the U.S., Western Europe and Japan are approaching retirement. As a result, it's becoming difficult to find qualified replacements for IT staffers.

Good customer service requires both process and attitude. Robust processes are needed to track and resolve complaints, and the right attitude needs to start at the top. Effective customer service provides significant benefits to the IT organization. Leverage excellent customer service to retain your customers, your employees and your corporate political capital. ■

Bart Perkins *is managing partner at Louisville, Ky.-based Leverage Partners Inc., which helps organizations invest well in IT. Contact him at BartPerkins@LeveragePartners.com.*

Submit your nomination today.

Storage Networking World (SNW), in conjunction with Computerworld and the Storage Networking Industry Association (SNIA), is seeking IT user-organization case study submissions for its "Best Practices in Storage" Awards Program.

Eligible nominees are exclusively IT end-user organizations. Nominations of IT end-user organizations are accepted from IT users themselves, their public relations representatives, or vendors on behalf of their IT end-user customers. Multiple submissions of case studies describing different deployments per IT end-user/organization will be considered.

Five finalists in each category will be recognized at Storage Networking World, April 6-9, 2009, at the Rosen Shingle Creek in Orlando, Florida. The top honoree in each category will be recognized on the main stage during the SNW Awards Ceremony. All finalists will be recognized on the event website, in an event press release, and may be featured in a special supplement of Computerworld magazine.

Honorees and Finalists will be recognized in each of the following five categories:

- Innovation and Promise
- Planning, Designing and Building a Strategic Storage Infrastructure
- ROI and Best Practices in Green Computing and the Data Center
- Selecting and Deploying Storage Networks
- Storage Reliability and Data Recovery

The deadline to submit a nomination:
Friday, February 9, 2009

To submit or for more information, visit:
bestpractices.computerworld.com/2009/snw

Career Watch

Most Wanted

The top 10 skills reported as 'very difficult to extremely difficult' to recruit for:

Java	25.6%
Java EE	25.6%
Oracle	23.2%
SAP	20.2%
Microsoft .Net	19.6%
SOA	17.9%
SAN	17.3%
Microsoft SQL Server	16.7%
Unix	14.9%
Web services	14.9%

BASE: 168 U.S.-BASED CIOs
SOURCE: GARTNER INC.'S 2008 IT MARKET COMPENSATION STUDY, OCTOBER 2008

ALL WE'RE ASKING FOR IS A LITTLE RESPECT

What's the worst part of searching for a job?

Never hearing back from prospective employers	45%
The time it takes	35%
The length of time it takes to get an offer	30%
Discourteous delays in the interview process that waste my time	19%
Hiring managers who are not prepared or knowledgeable	10%
Number of interviews required is excessive	10%

SOURCE: RECRUITMENT PROVIDER HYRIAN CORP. SURVEY OF JOB CANDIDATES, Q2 2008. OF THE 231 RESPONDENTS, 12% LISTED IT AS THEIR JOB CATEGORY OF HIGHEST INTEREST.

PAGE COMPILED BY JAMIE ECKLE.

■ PREMIER 100 IT LEADER

James M. Swartz

The CIO at **Sybase Inc.** answers questions about leadership and relationships with bosses.

You always hear experts advise IT pros to keep their skills up to date. I've been more than willing, but my boss usually tries to put me off, saying he needs me here to keep things running. "Things" are legacy systems that won't be around forever. I'm beginning to feel stymied, even sabotaged. What should I do? Ask your boss to talk with you one-on-one, so you can outline the skills that you have and how you might be able to add more value to the organization by being given other responsibilities. Using a direct approach will put focus on how your experience can help you meet the company's objectives. Be specific in what you're looking to do, and outline what those new responsibilities might be. Try to get responses from your boss regarding each of the items that you discuss, so that you know he understands your concerns. Let your boss know where you stand and where you want to go.

I usually don't hear from my boss until he's looking for someone to saddle with blame for something. Never a "Good job, Joe" from this guy. My formal reviews are always very positive, though. The work itself is rewarding enough, but this jerk wears me down. Do you think that's a valid reason to jump ship? The good news is that you did receive a positive review from your boss and that he does recognize your value. The problem is that the reviews are few and far between and day-to-day dialogue is missing. I suggest that you have more one-on-one meetings with your boss where you can discuss your concerns. Rather than jumping ship, implement a weekly meeting of the minds, so he understands what you're currently working on and what you need in order to get the job done. Talk to your boss to figure out how you can work more closely together, so that you can understand each other's needs. Once you have established a transparent working relationship, he should begin to recognize the value you bring to the organization.

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QUESTION?
If you have a question for one of our Premier 100 IT Leaders, send it to **askaleader@computerworld.com**, and watch for this column each month.

Who has inspired you as a leader? I have a lot of respect for one of the first CEOs I worked with at a research and development company. He was very good at identifying and cultivating top talent for the company. He hired smart, ambitious employees who had strong skills and were highly flexible and adaptable. He promoted the idea that everyone had the same job, and that was to help the company grow, and we all took on different assignments to obtain this goal. When I started at that organization, it was relatively small, and when I left, it was a multibillion-dollar corporation. That growth was directly related to the CEO and the employees he hired to take risks and contribute to the overall success of the company.

Calif based IT co. has multiple openings at its U.S. offices and at unanticipated client sites across the U.S. for Software Eng, Progrmmr. Analyst, Systems Analyst, Project Leader/Mgr., System Mgr., ERP Consultants, Biz Dvlpmnt. Consultant & Biz Analyst. Mail resumes to RJT Compuquest Inc., 23440 Hawthorne Blvd., #210, Torrance, CA 90505, Attn: HR

Software Engineer (Alpharetta GA, but may be relocated to other locations across the country): Design, develop and test applications on AS/400, RPG, COBOL, Java, J2EE etc. Email resumes Attn: HR Manager, Panacea System Inc. at hr@pansysinc.com.

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Capital Consultancy Services, Inc. (CCS), an established financial and banking consulting firm, is in need of computer professionals (systems analysts, implementation analysts) to implement, customize and support financial and banking computer information systems. Ideal candidates will have a Bachelor's degree in Computer Science or Engineering and experience with banking application software such as PROFILE and MUMPS. For our Computer/Banking Information Systems Managers we are seeking candidates to oversee the above duties. Ideal candidates will have a Master's degree in Computer Science or Engineering and experience with banking application software such as PROFILE and MUMPS. We will consider applicants with a Bachelor's degree and significant industry experience. Positions based in Philadelphia, PA and may require temporary relocation to various client sites throughout the United States and countries abroad. Qualified candidates should mail resumes to: HR Department, CCS, 2 Liberty Place, 50 S, 16th Street, Suite 2950, Philadelphia, PA 19102.

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Research In Motion (US), Irving, TX, multiple lvls of engineering positions are avail: Hardware Designer – TX1002 Member of Tech Staff – TX1012

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TeamOn Systems, Inc., Bellevue, WA, multiple lvls of engineering positions are avail: Software Testing Specialist – WA2001 Software Developer – WA2004 Submit resume to P.O. Box 141394, Irving, TX, 75014-1394 U.S.A. ref appropriate job title & req number.

IT analyst, DBA, S/W engineer needed by Kogent Systems to customize applications using Java, J2EE, ASP,VB, ASp.net, VB.net, SQlserver, Oracle, DB2, WebSphere/Logic, SAP, Abinito, Oracle. Jobsite various. MS/BS with IT exp. Contact Vishnu@kogentsys.com.

Felix Health Technologies seeks software engineers, system analyst, DBA, IT Manager to customize applications using Oracle, SAP, Informatics, WebLogic, Java, etc. Min is MS or BS with IT experience. Travel required. Send resumes to careers@felixhealth.com.

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Ascendent Telecommunications, Inc., Waukesha, WI, engineering positions are avail: Sales Engineer – WI3001 Submit resume toP.O. Box 141394, Irving, TX, 75014-1394 U.S.A. ref appropriate job title & req number.

Shark Tank

TRUE TALES OF IT LIFE AS TOLD TO SHARKY

'Tis the Season

It's demonstration time at this manufacturing company, where the engineering department is set to give upper management a side-by-side comparison of two financial information systems – one residing on the file server and available to every wired desktop, and the other serving Web pages only over a wireless LAN. "The wireless LAN version was extremely unpopular," says a pilot fish on the project. "Engineering took every opportunity to complain about it. I set up a wireless desktop PC a few days before the demo so they could practice their comparison. Thirty minutes before they were to have the demo, they sent out a e-mail to all employees, including upper management, saying they couldn't hold the demo because 'once again, the wireless system isn't working.' " Fish immediately heads over to troubleshoot the wireless desktop and soon sends his own broadcast e-mail reply: "By 'once again not working,' Engineering means someone unplugged the PC from the electrical outlet, pushed it aside and plugged in a Christmas tree that they set up this morning."

Any Answer?

Network engineer pilot fish is tapped by the IT director to be a member of the newly formed technology review committee. "Six months later, the IT director called me into a meeting to introduce new technology into the corporate network – outside of his newly formed TRC," reports fish. "I designed a network solution on the spot. Later that day, I e-mailed the IT director and asked, 'Does this need to go through the TRC, or is it exempt?' Director replied, 'Good question' – without any further direction. Arrrrgh!"

D'ya Think?

At this construction company, there's a regular need to document conditions at the job sites, reports a pilot fish on the inside. And it's down to a regular routine. "Employee A takes a digital camera to a construction site and takes some pictures," fish explains. "When he returns to the office, he gives the memory card to Employee B, who saves the pictures to the server and prints copies, which are given to Employee A for review. Employee A gives the selected copies to Employee C, who asks Employee D to scan the photos, save them as a PDF file and e-mail them to him. Employee D scans the photos, saves them as JPGs, and e-mails them to Employee E to convert them to a PDF and e-mail them back to D, who e-mails them to C, who e-mails them to the subcontractor to explain the site conditions. I have been asked if there is a better way to do this. . . ."

■ *Sharky recommends converting your true tale of IT life to an e-mail message and sending it directly to me at sharky@computerworld.com. You'll get a stylish Shark shirt if I use it.*

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Periodical postage paid at Framingham, Mass., and other mailing offices. Posted under Canadian International Publication agreement PM40063731. **CANADIAN POSTMASTER:** Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A 7C9. Computerworld (ISSN 0010-4841) is published weekly, except for combined issues in November and the last week and first week of each of the following months: December/January, March/April, May/June, June/July, and August/September by Computerworld, Inc., 1 Speen Street, Box 9171, Framingham, Mass. 01701-9171.

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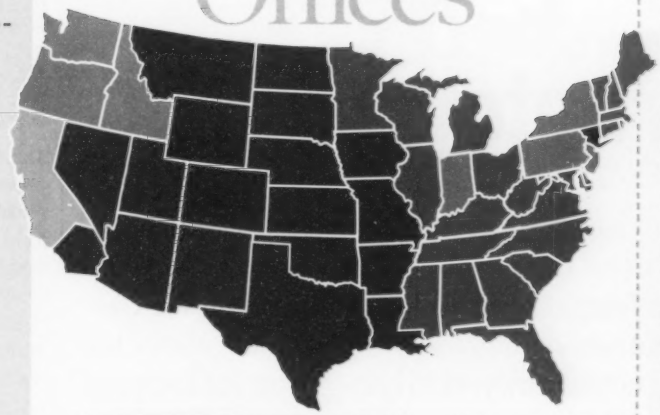

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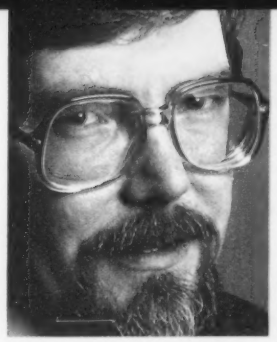
■ FRANKLY SPEAKING

Frank Hayes

Bankruptcy and You



NORTEL IS thinking about bankruptcy. *The Wall Street Journal* reported last week that the big Canadian telecommunications equipment maker has hired outside lawyers to help in case the company decides to seek bankruptcy court protection from creditors. The company said no bankruptcy filing is imminent.

Still, Nortel is thinking about bankruptcy. We should too.

After all, Nortel won't be the last IT vendor facing the B-word in this economic downturn. In the last recession in 2001, bankruptcy took out venerable disaster recovery vendor Comdisco, along with youngsters like Exodus Communications and MarchFirst. This time around, with so much of the financial industry hurting and automakers up against it too, technology vendors may take a bigger hit.

What then? *Bankrupt* is a scary word. We don't want our hardware and software suppliers to go away. We don't want our support contracts to be worthless. And we *really* don't want our software-as-a-service vendors to fold without warning.

Fortunately, bankruptcy doesn't always mean that a vendor will disappear or even falter. For example, high-end server maker SGI — the company formerly known as Silicon Graphics — filed for bankruptcy in 2006, emerged less than six months later, and never stopped doing business or making its products.

And just because a company is looking at bankruptcy, that doesn't mean that will happen. Vonage, the consumer voice-over-IP vendor, told the Securities and Exchange Commission in 2007 that if the company lost a series of patent infringement lawsuits, it could go bankrupt. Vonage lost or settled all of those suits. But so far, there's been no Vonage bankruptcy.

■ What talk of bankruptcy *does* mean is that a vendor is at risk – so you need information, contingency plans and an exit strategy.

What talk of bankruptcy *does* mean for corporate IT is that a vendor is at risk — so if the talk is about one of your vendors, you need information, contingency plans and an exit strategy.

You need to pay close attention to news reports about that vendor. Is it an acquisition target for another of your suppliers? Which products and services do analysts say are the most likely to be dumped to cut costs? Are they the ones you use or are considering?

Then you need planning. What happens if the products you use are end-of-lifed early? What if support prices are jacked up? What if product lines are slimmed down? What if you simply have to find another vendor?

You can come up with those answers long before things actually collapse. And you should. A bankruptcy may be an unavoidable crisis for a vendor, but there's no reason it should be any kind of crisis for you — and there's every reason to avoid that situation.

So if Nortel is thinking about bankruptcy and it's a vendor you depend on, now is a good time to think hard about what could happen.

Here's one other thing to think about: During the 2001 recession, Peregrine Systems *didn't* file for bankruptcy protection. Why should it? The company reported quarter after quarter of big profits.

But six months after the recession ended, financial irregularities turned up. Peregrine sued its accounting firm, fired its CEO and CFO, and filed for bankruptcy in late 2002. The remnants of the company were eventually sold to BMC and Hewlett-Packard.

In 2004, the fired executives were indicted for securities fraud for faking those rosy balance sheets. They eventually pleaded guilty and will be sentenced this month.

See? Thinking about bankruptcy isn't so bad after all. There are *much* worse ways to go. ■

Frank Hayes *is Computerworld's senior news columnist. Contact him at frank_hayes@computerworld.com.*

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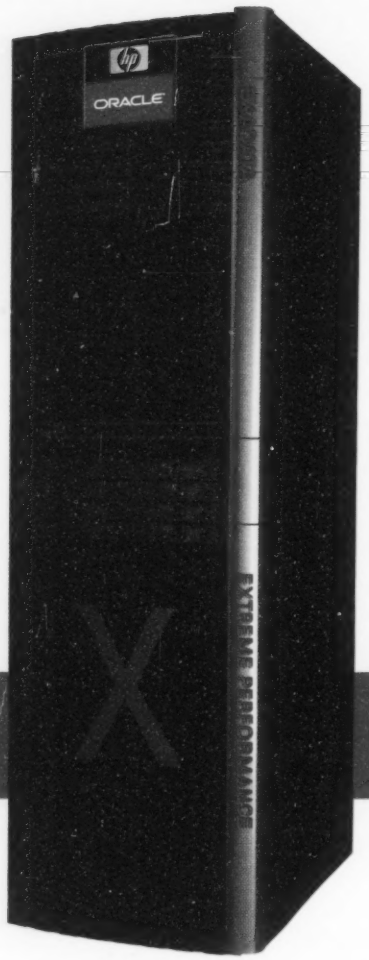

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